(1) பக்கங்களின் எண்ணிக்கை 72.

(2) புதுக்கித் திருப்பிய நாள் 12/91

(3) ஆதாரங் குறிப்பவர் சுருக்கொப்பம்

தமிழ்நாடு ஆவணக் காப்பகம்.

தமிழ்நாடு அரசு

P. W. துறை

அரசாணை எண்.
மு. கோப்புத் தாள் எண். 2412 (W) அச்சகம் பலவகை

நாள்: 19.9.1893 ~~199~~ .

...வோ கூண்டபடி கையாளவோ கூடாது.

...கா. 1—18,006—6-9-90.

2412
T

ADMINISTRATION REPORT

OF THE

STEES OF THE MADRAS HARBOUR FOR THE YEAR 1892-93.

2412/2

MARINE DEPARTMENT.

From

THE CHAIRMAN,

HARBOUR TRUST BOARD,

MADRAS.

To

THE CHIEF SECRETARY TO GOVERNMENT,

Marine Department.

DATED } 21st July 1893.
DESPATCHED } " "
RECEIVED " "

SUBJECT.

Administration Report.

Submitting the _____ of the Harbour Trust Board for the year 1892-93.

LAWRENCE ASYLUM PRESS.

2412/3

ADMINISTRATION REPORT

OF THE

TRUSTEES OF THE MADRAS HARBOUR FOR THE YEAR 1892-93.

The Trustees have the honour to submit their report on the Administration of the Madras Harbour Board for the official year 1892-93.

2. The Board consisted during the period of the following ten members:—

Elected by the Chamber of Commerce.
1. Mr. G. L. Chambers: resigned in November 1892, and was succeeded by Mr. J. A. Boyson in January 1893.
2 Mr. S. R. Turnbull.
3. Mr. H. Scott.

Elected by the Trades Association.
4 Mr. C. Seton.

Nominated by Government—

Officials ...
1. Mr. Ware Austin, I.C.S., Chairman.
2 Captain B. P. Creagh, R.I.M., who was acting for Captain H. A. Street, R.I.M., was relieved by the latter officer in May 1892, and subsequently succeeded by Captain W. Powell, R.I.M., in February. 1893.
3. Major O. V. Boddy, R.E.

Non-Officials ...
1. Mr. Cowasjee Eduljee Panday.
2. Haji Mahommad Abdul Hadi Badsha Saib.
3. M. Ry. M. Varadarajalu Chetty Garu.

Meetings.

3. The Board held 27 regular fortnightly meetings, and one special meeting, in February 1893, under Section 37 of Act II. of 1886 to consider the Budget Estimates for the year 1893-94; these meetings being the minimum prescribed by the Act.

Average attendance.

The average attendance has been 7·7 against 8·7 in 1891-92, and 8·6 in 1890-91; this is due to the absence from Madras, on duty, of two of the Official Trustees nominated by Government.

Revenue account Opening and closing balances.

4. The opening balance in the Revenue Account, on the 1st April 1892, was Rs. 11,45,648, and the balance to credit of this account with the Madras Bank, on the 31st March 1893, was Rs. 11,65,852, of which Rs. 7,93,157 were invested in Government 4 % pro-notes, of the par value of Rs. eight lakhs, and of the market value of over Rs. 8,40,000 on that date; these pro-notes are deposited with the Madras Bank for safe custody. The actual cash balance, on the 31st March, was Rs. 3,72,695. The necessity for providing such a large sum, at the end of the official year, was to meet the usual refund of one lakh of rupees on capital account, and interest on advances due to Government upon the 1st April.

Investments in 4 per cent. Government pro-notes.

5. The following have been the Revenue receipts during the period under review, as compared with the previous year.

Revenue receipts 1891-1892 compared with 1892-93.

	1891-92. Rs. A. P.	1892-93. Rs. A. P.
Harbour Dues, Imports ...	2,85,070 13 4	2,08,381 10 5
Do. Exports ...	80,716 1 10	64,453 8 0
Storage	7,971 3 7	2,572 13 11
Wharfage	2,923 0 0	6,466 5 4
Rent of Properties ...	1,773 12 11	1,248 12 0
Miscellaneous	9,305 14 4	5,450 11 8
Cranage	149 1 7	32,174 14 10
Penalties (Section 84) ...		39 0 0
	3,87,909 15 7	3,20,787 12 2
Interest on Investments ...	26,360 11 0	28,692 11 8
Porterage	1,08,322 14 6	1,02,150 11 8
	5,22,593 9 1	4,51,631 3 6
Contribution from Port Funds ...	50,000 0 0	65,000 0 0
Rs.	5,72,593 9 1	Rs. 5,16,631 3 6

Increase of closing balance

6. It is satisfactory to note, that notwithstanding the reduced income as shown above, the closing balance, as stated in para. 4, has increased by Rs. 20,204: of which Rs. 15,000 are accounted for by an enhanced contribution from Port funds to that extent. Excluding this item of receipts the Revenue of the Board has been Rs. 70,962 less than in the previous year; but in spite of this heavy reduction in income all liabilities have been met, a considerable sum has been spent upon petty construction and repairs, and the addition to the closing balance is, under such circumstances, very satisfactory.

7. The following statement gives details of receipts and charges from the 1st April 1892 to the 31st March 1893.

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	Rs. A. P.	Rs. A. P.	Rs. A. P.
Opening balance—			
Government Securities (Par value 5,00,000)		4,67,097 8 10	
1. Cash in the Bank of Madras ...	6,77,942 3 2		
2. General Cash in Office	108 6 6		
3. Advance for Contingencies... ...	500 0 0		
		6,78,550 9 8	
			11,45,648 2 6
Receipts.			
I. Harbour Dues Collections—			
Beach Import	1,48,127 11 2		
Pier do.	60,253 15 3		
Beach Export	22,818 1 5		
Pier do.	41,635 6 7		
Storage	2,572 13 11		
Wharfage	6,466 5 4		
Cranage	32,174 14 10		
Penalties (Section 84)	39 0 0		
Demurrage	... ...	3,14,088 4 6	
Porterage—			
Beach	56,655 14 4		
Pier	32,249 8 4		
Haulage	10,457 1 5		
Miscellaneous	2,788 3 7	1,02,150 11 8	
Miscellaneous—			
Rent of Properties	1,248 12 0		
Harbour Trust Properties	547 5 6		
Provisions...	3,736 12 0		
Water Collection	1,116 10 2	6,699 7 8	
Sundries			4,22,938 7 10
II. Contribution from Port Funds		...	65,000 0 0
III. Interest realized on Government of India 4 per cent. Promissory Notes... ...		...	28,692 11 8
Amount refunded from Construction Funds in repayment of advances made from time to time from Revenue during the financial year 1892-93		...	1,31,000 0 0
Total Rupees ...			17,93,279 6 0
Charges.			
I. Interest (under Section 30)		1,87,039 7 10	
II. Repayment of Loan for Construction of Harbour		1,00,000 0 0	
			2,87,039 7 10
III. Establishment, &c.—			
1. Chairman's salary	4,800 0 0		
2. Secretary's do.	9,350 0 0		
3. Correspondence Department ...	3,494 15 8		
4. Accounts Department	6,043 3 9		
5. Cash Department...	4,088 8 7		
6. Traffic Department (Shore Staff) ...	25,577 10 8		
7. Preventive Service	12,546 15 3		
8. Do Boatmen ...	1,186 0 0		
9. Contribution to Government for Pensions	624 1 2		
10. Fees to Trustees	6,360 0 0		
11. Contribution to Provident Fund...	2,886 2 10	76,957 9 11	

IV. Contingencies—							Rs. A. P.
				Rs.	A.	P.	
	Forward...			76,957	9	11	
(*a*) Subject to Regular Audit.—							
		Rs.	A.	P.			
Postage		57	14	0			
Receipt Stamps		193	11	0			
Telegrams		...	...	...			
Furniture		531	0	0			
Fees for Audit		750	0	0			
Law Charges		1,113	0	0			
Stationery and Printing		2,478	5	3			
Advertisement charges		202	6	0			
Uniform for Preventive Service ...		1,405	0	0			
					6,731	4	3
(*b*) Admissible without Detail Audit.—							
Overtime Fees to Establishment ...		4,212	11	11			
Do. Preventive Service and Boatmen... ...		3,255	2	9			
Miscellaneous		3,952	4	8			
					11,420	3	4
V. Refunds		...			2,606	6	2
VI. Petty Construction and Repairs—							
New Works...		10,853	12	5			
Repairs		17,215	1	2			
Tools and plant		7,668	5	10			
					35,737	3	5
							1,33,452 11 1
VII. Porterage—							
1. Coolies, Pier		13,533	3	4			
2. Do. Beach and Custom-House ...		45,356	15	7			
3. Madras Railway Company... ...		897	2	6			
4. South Indian Railway Company ...		274	13	11			
5. Coasting Cargo		1,010	2	5			
6. Boat Hire		3,839	15	1			
7. Claims for losses and damage ...		790	15	11			
8. Engine Charges		1,452	10	9			
9. Refunds		568	11	11			
10. Steam Crane Charges		2,721	9	2			
11. Contribution to Cooly Provident Fund		1,012	2	9			
					71,458	7	4
CONTINGENCIES—							
(*a*) Subject to Regular Audit—							
Postage		...	...	...			
Receipt Stamps		12	6	0			
Telegrams		...	...	...			
Furniture		36	0	0			
Tarpaulins		152	0	0			
Law Charges		28	8	0			
Stationery and Printing		411	13	0			
Advertisement Charges		...	...	...			
Lighting Pier and yards		2,019	15	5			
					2,660	10	5
(*b*) Admissible without Detailed Audit—							
Miscellaneous					1,816	4	9
							75,935 6 6
Advances to Construction account					...		1,31,000 0 0
Total Expenditure					...		6,27,427 9 5
Balance on the 31st March 1893.—							
Government Securities (Par value 8,00,000) ...					7,93,157	0	10
Cash in the Bank of Madras		3,71,724	13	1			
General Cash in Office		469	14	8			
Advance for Contingencies		500	0	0	3,72,694	11	9
							11,65,851 12 7
Total Rupees					...		17,93,279 6 0

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8. Compared with the previous year the chief items of receipts and expenditure have been as follows :—

ITEMS.		1891-92.	1892-93.	REMARKS.
		Rs.	Rs.	
Receipts.				
Opening Balance		10,60,174	11,45,648	
Receipts—				
(*a*) Harbour Dues—Imports ...		2,85,071	2,08,382	
(*b*) Do. do.—Exports ...		80,716	64,453	
(*c*) Storage and Wharfage ...		10,894	9,039	
(*d*) Penalties (Section 84) ...		..	39	
(*e*) Miscellaneous		12,500	6,699	
(*f*) Interest on Balance invested in Government Securities ...		26,361	28,693	
(*g*) Contribution from Port Funds		50,000	65,000	
Cranage		149	32,175	
Porterage		1,08,323	1,02,151	
Total Receipts...		5,74,014	5,16,631	
Total Rs. ...		16,34,188	16,62,279	
Expenditure.				
Salaries to Chairman and Secretary ...		13,550	14,150	
Fees to Trustees		5,910	6,360	
Establishment		43,432	52,937	
Overtime Fees		8,487	7,468	
Other Charges		13,458	13,570	
Contribution for Pensions		930	624	
Refunds		968	2,606	
Porterage		96,806	75,935	
		1,83,541	1,73,650	
Petty Construction and Repairs ..	Works ...	14,603	10,854	
	Repairs ...	11,508	17,215	
	Tools and Plant...	...	7,668	
		26,111	35,737	
Interest on Loans from Secretary of State ...		1,78,888	1,87,040	
Repayment to Government of Loans from Secretary of State ...		1,00,000	1,00,000	
Total Expenditure...		4,88,540	4,96,427	
Closing Balance...		11,45,648	11,65,852	
Total Rs. ...		16,34,188	16,62,279	

Decline in Harbour dues.

9. It will be observed from the above statement, that Harbour dues show a serious decline, both in imports and exports, even after adding the item cranage now shown separately, which was previously included in the dues collected upon cargo passing over the

Pier. The total reduction in charges levied upon cargo for the use of the Harbour and premises, including storage, wharfage, and cranage, has been Rs. 62,779.

The reason for this is the general dullness of trade; and the falling off in receipts would have been still more marked, had it not been that imports of food grains from Coast Ports continued much in excess of normal years.

10. Porterage receipts have declined in sympathy with the general stagnation of Trade: but against lower receipts there is a corresponding reduction in charges, which are chiefly for cooly labour, and the account continues to show a satisfactory margin.

Trustees' fees.

11. In the items of expenditure: fees to Trustees are slightly in excess of last year, two more fortnightly meetings having fallen within the period.

Establishment charges.

12. Establishment charges amount to Rs. 52,937 as against Rs. 43,432. There has been no increase in the Staff, or in the pay of individuals, to any appreciable extent: the reason for this apparent increase is that the Porterage Department Establishment, which was formerly charged direct to the Porterage Accounts, has now, under Act I. of 1892, been transferred to the Traffic Department.

Refund of capital advance and interest.

13. The most serious item of expenditure is the refund of one lakh of rupees to Government, and the charge for interest upon Capital expenditure, at 4½ per cent. per annum; these items have increased from Rs. 2,78,888 to Rs. 2,87,040: and will continue to increase until the completion of the Harbour.

Advances for Harbour construction.

14. Advances from Revenue Account for purposes of Harbour construction, recouped by advances, drawn from the Accountant-General on the 31st March, show a great reduction: to Rs. 1,31,000 from Rs. 6,25,000, due to the near completion of the Harbour, and the slow progress which only is possible at the Pier heads of both arms.

Petty Construction and Repairs.

15. In petty construction and repairs a sum of Rs. 35,737 has been spent against Rs. 26,111 last year. The chief item of new work, has been the extension of the coal yard, which has been about doubled in area, the extension having been found necessary to meet the increased demand for space for the storage of coal.

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16. While receipts have been less than last year, the falling off was foreseen by the Trustees in their Budget Estimates of receipts and charges. The following tables compare the Budget Estimates with the Revised Estimates and the Actuals for the year.

Budget Estimates compared with Actuals

Items.	Budget Estimate for 1892-93.	Revised Budget Estimate for 1892-93.	Actuals of 1892-93.	Plus or Minus.
	Rs.	Rs.	Rs.	Rs.
Revenue Account.				
Opening Balance	11,01,836	11,45,648	...	...
Receipts.				
Contribution from Port Funds	65,000	65,000	65,000	
Beach Import	1,25,000	1,25,000	1,48,128	+ 23,128
Pier Import	60,000	60,000	60,254	+ 254
Beach Export	25,000	25,000	22,818	— 2,182
Pier Export	35,000	35,000	41,635	+ 6,635
Wharfage	2,500	6,000	6,466	+ 466
Storage	5,000	2,000	2,573	+ 573
Penalties	...	...	39	+ 39
Rent of Harbour Trust Properties ...	1,000	1,000	1,249	+ 249
Miscellaneous	1,500	4,000	5,450	+ 1,450
Interest on Investments (Government Securities) ...	35,000	35,000	28,693	— 6,307
Cranage	40,000	30,000	32,175	+ 2,175
Porterage Account	1,05,000	95,000	1,02,151	+ 7,151
Total ...	5,00,000	4,83,000	5,16,631	...
Total including the opening Balance ...	16,01,836	16,28,648	...	...
Charges.				
Refunds	2,000	2,500	2,606	+ 106
Interest (under Section 30)	1,87,040	1,87,040	1,87,040	...
Repayment of Loan for Construction of Harbour ...	1,00,000	1,00,000	1,00,000	...
Chairman's Salary	4,800	4,800	4,800	...
Secretary's Salary	9,800	9,350	9,350	...
Establishment.				
Correspondence Department	3,730	3,560	3,495	— 65
Accounts do.	6,648	6,050	6,043	— 7
Cash do.	2,760	4,140	4,089	— 51
Traffic (Shore Staff)	28,068	26,000	25,578	— 422
Contribution to Government for Pensions	900	900	624	— 276
Preventive Service	12,660	12,660	12,547	— 113
Do. Boat Establishment	1,224	1,224	1,186	— 38
Fees to Trustees	8,000	7,000	6,360	— 640
Contribution to Provident Fund	2,200	3,000	2,886	— 114
Do. do. (Coolies)	1,480	1,100	1,012	— 88
Porterage labour under Act I. of 1892	75,000	70,000	74,132	+ 4,132
Claims for loss and damage of cargo ...	5,000	1,500	791	— 709
Contingencies.				
(a) Subject to Regular Audit—				
Postage	100	100	58	— 42
Receipt Stamps	200	200	194	— 6
Telegrams	50	50	...	— 50
Furniture	500	600	531	— 69
Fees for Audit	750	750	750	...
Law Charges	2,000	2,000	1,113	— 887
Stationery and Printing	3,000	3,000	2,478	— 522
Advertisement Charges	500	500	202	— 298
Uniform to Peons, Preventive Service ...	1,500	1,500	1,405	— 95
(b) Admissible without detailed audit Contingencies other than office—				
Fees to Establishment for working overtime on Sundays and Holidays	3,500	4,000	4,213	+ 213
Fees to Preventive Service do. do. ...	3,500	3,500	3,255	— 245
Miscellaneous	3,000	4,000	3,952	— 48
Petty Construction and Repairs.				
New Works	30,000	25,000	10,854	— 14,146
Repairs to Pier, Machinery, &c.	10,000	15,000	17,215	+ 2,215
Tools and Plant	5,000	8,000	7,668	— 332
Total ...	5,14,840	5,09,024	4,96,427	...

Comparison of Budget and Revised Estimates with Actuals.

Pier. The total reduction in charges levied upon cargo for the use of the Harbour and premises, including storage, wharfage, and cranage, has been Rs. 62,779.

The reason for this is the general dullness of trade; and the falling off in receipts would have been still more marked, had it not been that imports of food grains from Coast Ports continued much in excess of normal years.

10. Porterage receipts have declined in sympathy with the general stagnation of Trade: but against lower receipts there is a corresponding reduction in charges, which are chiefly for cooly labour, and the account continues to show a satisfactory margin.

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13. The most serious item of expenditure is the refund of one lakh of rupees to Government, and the charge for interest upon Capital expenditure, at 4½ per cent. per annum; these items have increased from Rs. 2,78,888 to Rs. 2,87,040: and will continue to increase until the completion of the Harbour.

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14. Advances from Revenue Account for purposes of Harbour construction, recouped by advances, drawn from the Accountant-General on the 31st March, show a great reduction: to Rs. 1,31,000 from Rs. 6,25,000, due to the near completion of the Harbour, and the slow progress which only is possible at the Pier heads of both arms.

Petty Construction and Repairs.

15. In petty construction and repairs a sum of Rs. 35,737 has been spent against Rs. 26,111 last year. The chief item of new work, has been the extension of the coal yard, which has been about doubled in area, the extension having been found necessary to meet the increased demand for space for the storage of coal.

2412/6

Budget Estimates compared with Actuals

16. While receipts have been less than last year, the falling off was foreseen by the Trustees in their Budget Estimates of receipts and charges. The following tables compare the Budget Estimates with the Revised Estimates and the Actuals for the year.

Comparison of Budget and Revised Estimates with Actuals.

ITEMS.	Budget Estimate for 1892-93.	Revised Budget Estimate for 1892-93.	Actuals of 1892-93.	Plus or Minus.
	Rs.	Rs.	Rs.	Rs.
Revenue Account.				
Opening Balance	11,01,836	11,45,648	...	...
Receipts.				
Contribution from Port Funds	65,000	65,000	65,000	
Beach Import	1,25,000	1,25,000	1,48,128	+ 23,128
Pier Import	60,000	60,000	60,254	+ 254
Beach Export	25,000	25,000	22,818	— 2,182
Pier Export	35,000	35,000	41,035	+ 6,035
Wharfage	2,500	6,000	5,466	+ 466
Storage	5,000	2,000	2,573	+ 573
Penalties	...	...	39	+ 39
Rent of Harbour Trust Properties	1,000	1,000	1,249	+ 249
Miscellaneous	1,500	4,000	5,450	+ 1,450
Interest on Investments (Government Securities) ...	35,000	35,000	28,693	— 6,307
Cranage	40,000	30,000	33,175	+ 2,175
Porterage Account	1,05,000	95,000	1,02,151	+ 7,151
Total ...	5,00,000	4,33,000	5,16,631	...
Total including the opening Balance ...	16,01,836	16,28,648	...	...
Charges.				
Refunds	2,000	2,500	2,606	+ 106
Interest (under Section 30)	1,87,040	1,87,040	1,87,040	...
Repayment of Loan for Construction of Harbour ...	1,00,000	1,00,000	1,00,000	...
Chairman's Salary	4,800	4,800	4,800	...
Secretary's Salary	9,800	9,350	9,350	...
Establishment.				
Correspondence Department	3,720	3,560	3,495	— 65
Accounts do.	6,648	6,050	6,043	— 7
Cash do.	2,700	4,140	4,089	— 51
Traffic (Shore Staff)	28,068	26,000	25,578	— 422
Contribution to Government for Pensions	900	900	624	— 276
Preventive Service	12,660	12,660	12,547	— 113
Do. Boat Establishment	1,224	1,224	1,186	— 38
Fees to Trustees	8,000	7,000	6,360	— 640
Contribution to Provident Fund	2,200	3,000	2,886	— 114
Do. do. (Coolies)	1,489	1,100	1,012	— 88
Porterage labour under Act I. of 1892	75,000	70,000	74,132	+ 4,132
Claims for loss and damage of cargo	5,000	1,500	791	— 709
Contingencies.				
(a) Subject to Regular Audit—				
Postage	100	100	58	— 42
Receipt Stamps	200	200	194	— 6
Telegrams	50	50	...	— 50
Furniture	500	600	531	— 69
Fees for Audit	750	750	750	...
Law Charges	2,000	2,000	1,113	— 887
Stationery and Printing	3,000	3,000	2,678	— 322
Advertisement Charges	500	500	202	— 298
Uniform to Peons, Preventive Service	1,500	1,500	1,405	— 95
(b) Admissible without detailed audit Contingencies other than office—				
Fees to Establishment for working overtime on Sundays and Holidays	3,500	4,000	4,213	+ 213
	3,500	3,500	3,255	— 245
Fees to Preventive Service do. do. ...	3,000	4,000	3,952	— 48
Miscellaneous				
Petty Construction and Repairs.				
New Works	30,000	25,000	10,854	— 14,146
Repairs to Pier, Machinery, &c.	10,000	15,000	17,215	+ 2,215
Tools and Plant	5,000	8,000	7,668	— 332
Total ...	5,14,840	5,09,024	4,96,427	...

Accuracy of Estimates.

17. It is to be observed that in nearly all items of receipts, the Trustees' Estimates were framed with due caution, within the actuals realised ; while on the other hand charges have in nearly every instance been kept below the Estimates.

Increased imports of Coal.

18. The chief cause of divergence was a large import of coal for the Gold Mines in the Province of Mysore, which unexpectedly swelled the receipts under the item Harbour Dues Beach imports, after the revised Estimates were framed. This resulted in a large increase in dues under this head, and of necessity a corresponding increase in Porterage receipts and charges.

Petty construction and repairs.

19. Under the head Petty Construction and Repairs an apparent increase appears in the latter item. This is due to the Engineer's bills, which were much in arrears, having been brought nearly up to date, owing to an improved system in the rendering of the accounts. The extra payments have been met from the unexpended allotment of New Works, under the same head of expenditure.

Reduction in trade of Madras.

20. The reduction in the trade of this port cannot altogether be attributed to general stagnation and uncertain exchange. The want of proper Railway communication, and of facilities tending to reduce shipping and landing charges, and by giving additional facilities and a greater volume of cargo to steamers reducing freights, are matters which threaten greater disaster to the prosperity of this port, than occasional seasons of famine or scarcity, or even uncertain and fluctuating exchange : moreover the trade of this port is unduly handicapped, in the provisions of Act II. of 1886, for the repayment of loans for Harbour construction, and in the rate of interest charged.

Address to H. E. The Viceroy and Governor-General.

21. In November 1892 H. E. the Viceroy and Governor-General visited Madras, and the Trustees took the opportunity of presenting to him an address, in connection with which it should be observed, that the course of events has since tended to confirm the Board in its opinion, then expressed, that the diversion of the legitimate trade of this port to other routes, necessitates the serious reconsideration of any proposals to facilitate trade by the construction of Docks at this port : indeed the Board now fails to see that any good purpose can be served by large expenditure in this direction, when the Railways which ought to bring trade to this port have been and are being so constructed as to "Boycott" Madras and drive trade away from the Harbour.

22. The address to H. E. the Viceroy, on these two points, was as follows :—

To

HIS EXCELLENCY THE VICEROY,

Governor-General of India.

YOUR EXCELLENCY,

We, the Trustees of the Madras Harbour and Conservator of the Port, respectfully tender to you a cordial welcome to the Harbour

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and Port of Madras ; and in doing so would request permission to invite Your Excellency's attention to a few matters which we consider of paramount importance to the welfare of the Trade of this Port.

Necessity for improved Railway Communication.

First.—The necessity of Improved Railway Communication between the Districts and the Shipping : in which connection we would refer Your Excellency to an extract printed herewith from our report for the quarter ending 30th June 1892, as follows :—

"The Chamber of Commerce has strongly urged upon Government the "necessity for direct communication to Madras with the East Coast Railway, "now under course of construction ; but it is understood that this is not at "present to be granted, and that the working of a section of this Railway is "to be handed over to the Nizam's State Railway."

"The question of Railway Communication is of paramount importance to "the trade of this Port, and Presidency ; but it cannot be expected that trade "will increase when Railways lately built, under construction and proposed, "tend to divert trade from Madras."

"If the trade of this Presidency is to be diverted by the Railways to the "West Coast, the proposal to construct Docks must be seriously reconsidered, "for a steady decrease in trade must be expected to follow facilities given in "direct antagonism to the interests of this Port, favouring diversion over "long leads, at reduced rates, assisted by lower rates of freight, at Bombay."

"The Board strongly supports the representations of the Chamber of "Commerce regarding the vital importance of improved Railway Communi-"cation with this Presidency City and Harbour ; and would submit that Rail-"way Construction should be carried out with a view to increase the volume "of trade from hence, rather than to diminish it."

"If this were done, freights would naturally fall ; but if the construc-"tion of Railways tends in the future to divert trade from Madras, the use-"fulness of the Harbour will be seriously impaired : indeed it is a question "whether the trade of the Port, if reduced in any way, can stand the extra "tax imposed upon it for the present, and near future, by the Harbour ; for "it must be remembered that so far no reduction in charges has been "feasible."

"With the refund to Government of one lakh of rupees a year, and "payment of interest at 4½ per cent. upon a maximum outlay larger than was "contemplated, a severe strain is put upon the resources of this Port ; and "improved facilities of Railway Communication tending to increase the "volume of trade is, it appears to the Board, absolutely necessary to enable "the Harbour to serve the purpose of its construction."

"The Board would therefore commend to the serious consideration of "the Right Honorable the Secretary of State for India, the absolute and vital "necessity in the interests of the trade of this Presidency, of placing this "Harbour in such communication with the Districts by rail, as would enable "the Trustees to co-operate, by the construction of Docks, and retain within "the Presidency its natural trade. If it be diverted to the West Coast or "elsewhere and becomes dependent upon long lines of Railway, and upon "freights from distant ports, it cannot be expected to remain for long in a "healthy condition."

Refund of one lakh annually to Government in repayment of capital advances for construction and rate of interest charged thereon.

Secondly.—The exceedingly heavy burden upon the trade of this Port, consequent upon our having to refund to Government one lakh of rupees annually, and pay interest at 4½ per cent. upon advances made for construction.

In our report for the quarter ending 30th September 1892, we wrote as follows :—

"It is to be noted that the receipts under all heads for the half-year "aggregated Rs. 2,82,857 : while interest payable to Government under Sec- "tion 30 of the Harbour Trust Act, and repayment of loan, amounted to "Rs. 2,87,039 ; in other words more than six months' receipts are required to "meet these two liabilities of the Trust."

"The Bombay Port Trust with a very much larger indebtedness to "Government, and an enormously greater trade, has to refund to Government "only the same sum as Madras, *viz.*, one lakh of rupees annually ; and not "only this : for from the last report of the Bombay Trust it would appear "that the Bombay Government does not require the Bombay Trust to refund "this amount annually, as a matter of course, but permits it to be utilised "upon capital expenditure."

"The Trustees of the Madras Harbour would bring prominently to notice "the disadvantage in this respect under which Madras labours ; and would "request that Government may take the matter into consideration, with a view "to granting some remission in this very heavy impost upon the trade of the "Port."

With reference to the above it should be noted that, as stated in our last annual report

"One lakh of rupees has year by year, since the foundation of the Trust, "been repaid to Government under Section 31, Act II. of 1886 ; the total "repayments to the 31st March 1892 aggregated Rupees five lakhs ; and "upon that date the sum of Rs. 49,54,252 was due by the Trust to Govern- "ment, and the sum of Rupees seven and a half lakhs is in round numbers "required under the sanctioned estimate to complete the Harbour from the "commencement of the current official year."

* * * * * *

23. The question of the rate of interest, and the comparatively high proportion of refund of capital advances, compulsory upon the Trustees of this Harbour, has many times been alluded to, and has formed the subject of representations to Government. The Trustees brought the matter to notice in their quarterly administration report for September 1892 as noted above, and Government in its order thereon, directed that the matter should have been brought forward separately. The following letter was accordingly addressed to Government ; but up to the present no reply has been received. The Board hopes that, in view of the brighter financial outlook, Government may be able to accede to its request, that the rate of interest may be reduced, as also the sum which has annually to be refunded.

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Representation made to Government upon the above subject.

"From WARE AUSTIN, Esq., I.C.S., Chairman, Harbour Trust Board, Madras, to the Honorable Mr. C. A. GALTON, M.A., I.C.S. Acting Chief Secretary to Government, Marine Department, 4th February 1893.

SIR,

Referring to para. 2 of G.O., Public Works, No. 3414 W., dated 13th December 1892, regarding the question of refund of capital advances, raised in paras. 10 and 11 of my quarterly report, No. 2871, dated 28th October, the Trustees of the Harbour would submit the following remarks, and would request that the matter may be referred, with the support of the Government, for the favorable consideration of the Right Honorable the Secretary of State for India, in view of a reduction being made in the annual refund of one lakh of rupees payable under Section 31, Act II. of 1886, by the Trust to Government.

2. The Trustees would also request that the amendment of Section 30, which fixes the rate of interest at 4½ per cent. per annum, may be taken into consideration, and would strongly urge that a reduction in this rate might be granted.

3. In para. 9 of my report above referred to, I pointed out that interest and repayment of loan under Sections 30 and 31 amounted to Rs. 2,87,039, or more than six months of the total gross receipts : and the Trustees would bring prominently to notice that the estimated expenditure for the official year 1893-94 amounts to Rs. 3,18,460, under these two heads : while, Harbour construction not being completed, the maximum has not yet been reached.

4. Not only did the refund of capital and interest amount, in the current year 1892-93, to more than six months' gross receipts, but the revenue during those six months, April—September, was unduly swelled by the exceptionally large imports of food grains, consequent upon the scarcity prevailing in the districts.

5. The actual income of the Harbour Trust during the years 1887-1892 excluding contribution from Port Funds and interests on investments has been as follows :—

	Rs.
1887-88 ...	2,96,584
1888-89 ...	2,66,967
1889-90 ...	3,26,747
1890-91 ...	3,59,383
1891-92 ...	3,88,426
Total...	16,38,107

being an average of Rs. 3,27,621 for the five years, which however does not include receipts and expenditure on porterage account, the credit balance on which will probably amount to a quarter of a lakh of rupees annually.

6. The anticipated future income of the Trust, exclusive of contribution from Port Funds and interest upon investments, which must under existing circumstances quickly be depleted, may therefore be taken in round figures to be about 8½ lakhs of rupees per annum ; while as pointed out above Rs. 3,18,460 is required to meet refund of interest and repayment of loan on the 1st April next, this amount will moreover increase year by year until the maximum is reached upon completion of the Harbour.

7. The Trustees would therefore submit that their income is insufficient to meet such heavy annual liabilities to the Right Honorable the Secretary of State ; while it must be remembered that although much greater

facilities have resulted, yet up to the present the Harbour has, owing to the imposition of dues, effected little economy to importers and shippers in the charges incidental to landing and shipping operations, and any increase to existing rates under sections 46 or 47 would be a retrograde step much to be deprecated, and opposed to the interests of the trade of this port, in which the Harbour has been constructed.

8. The Board does not wish to draw any invidious comparisons; but at the same time would invite very serious attention to the exceedingly heavy burden imposed upon the trade of Madras by Sections 30 and 31, Act II. of 1886, as compared with the liabilities of Bombay: a terminal port, with an immensely greater volume of trade, with enormously greater receipts and resources, and with comparatively far easier terms imposed upon it, than has Madras, in the matter of these two items of liability.

9. It does not appear from the Bombay Port Act VI. of 1879, that any liability whatever is imposed upon the Trustees of that port to refund to the Right Honorable the Secretary of State for India, any fixed annual sum; but on the contrary it would seem that after providing for all other liabilities, refunds of capital advances may be made out of credit balances, to such extent as may be prescribed by the local Government.

10. In their report for the year ending 31st March 1892, the Trustees of the Port of Bombay record (para. 3) the repayment to Government of Rs. 69,636 being "balance of one lakh of rupees set aside each year for the reduction of capital debt, *or construction of new works chargeable to capital*," and it is to be noted that having run into arrears of interest due to the Secretary of State—which is not permitted to the Madras Trust—a special Act, I. of 1885, was passed "to legalize the payment by the Trustees of the Port of the Bombay of certain arrears of interest * * * which accrued due during the years 1873-77, both inclusive, aggregating Rs. 2,36,013," in other words, it required a special enactment of the Legislature to legalise, in Bombay, a payment which was but little greater in amount, than the burthen now imposed upon Madras yearly, by Sections 30 and 31 of Act II. of 1886.

11. In the same report the debt due by Bombay to the Secretary of State is stated at Rs. 3,60,58,359 and securities guaranteed by Government Rs. 1,33,11,676, total Rs. 4,93,70,035; repayment of which can only be made apparently out of *surplus* revenue; by transfer to Government of Port Trust property; or by sale proceeds of property or plant charged to capital.

12. The debt of the Madras Harbour Trust, at the commencement of the current official year (1892-1893) amounted to Rs. 49,54,242, or in round figures to just one-tenth of that of the Bombay Port Trust.

13. The income in 1891-92 of the Bombay Trust is stated as Rs. 48,10,314, and the expenditure as Rs. 46,23,962; against a gross income from all sources of the Madras Trust of Rs. 5,74,014 and expenditure Rs. 4,88,540.

14. The Trustees of the Madras Harbour would, therefore, request that the disadvantages under which Madras labours, in the above respects, may be brought prominently to the notice of the Right Honorable the Secretary of State; with a view to his taking into consideration the reduction of the amount annually payable in refund of capital advances under Section 31, and interest under Section 30; for it must be remembered that Madras is only a port of call, and should be placed in a position to hold out every inducement to shipping and to trade, to make use of the Harbour; while at present the liabilities of the Board, under these sections, not only preclude any possibility of making any reductions in dues, or of undertaking any extensive and costly improvements, with a view to giving greater facilities, but would appear to threaten financial embarrassment in the near future."

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24. The Madras Harbour Trust Act follows very closely the wording of the Bombay Port Trust Act, and the Trustees would bring prominently to notice that, but for two unforeseen and unexpected circumstances, Act II. of 1886 could not have been worked up to the present, without increasing the rates of Harbour Dues, which were in force when the Trust was constituted.

Revision of Port Fund balances.

25. *First.*—Shortly after Captain Street, R.I.M., was appointed Presidency Port Officer, he undertook the investigation and redistribution of Port Fund balances. In its Order thereon, No. 171,172, Marine, dated 24th April 1889, para. 4, Government wrote "The result of the revision * * * has been to show that the Port of Madras has been enormously overcharged in the past. The balance to its credit, as now determined, amounts to Rs. 6,68,179, besides Rs. 71,708 pilotage fees: while under the old system of accounts these amounts would have been only Rs. 2,45,138 and Rs. 13,427 respectively."

26. Government further directed that Madras should 'eventually get its full share of the revised balances'; and of the Madras balance, Rs. 7,39,886, the whole of the Pilotage Fund account, and large sums from the Port funds, have been paid to the Trust.

Contracts for handling cargo.

27. *Secondly.*—When the Trust was constituted, a practice was found in existence of arranging with contractors, for the handling of cargo upon the Pier: and a new contract was entered into, by the first Board, for three years, during which the payments made to the contractors amounted to Rs. 61,463, or an average of Rs. 20,387 yearly. These payments were made at annas 2-4 per ton, on dead-weight, and annas 2-2 on measurement goods.

In addition to this rate per ton, the contractors received payment at per package from consignees.

Departmentally worked at reduced rates.

Saving effected

28. Upon the expiration of this contract, tenders received for a fresh contract, which was contemplated, were all at enhanced rates: and the Board's Secretary offered to organise the work departmentally. A schedule of rates per package, as paid to contractors, was drawn up and submitted to the Chamber of Commerce, which body suggested various reductions; these, and the Secretary's proposals, were accepted by the Board, and the result has been that not only, even at these reduced rates, has the sum of over Rs. 20,000 previously paid annually to the contractors been saved in full, but a large cash profit has also been secured.

Act I. of 1892.

29. The importance of this unexpected addition to the Board's income was so great, that Government passed Act I. of 1892 to legalise the Trust having undertaken the work: and by it a large annual saving is made and additional income obtained, not contemplated in Act. II. of 1886.

Income insufficient as Act II. of 1886 was framed.

30. Without these two additional sources of income, the rates of Harbour dues, as now framed and in force under Section 45, Act II. of 1886, and which are practically the same as those previously charged would have been insufficient to meet the expenditure, and must have been increased, chiefly on account of the very heavy items of liability to Government, which compel the Trust under Act II. of 1886 to refund one lakh of rupees annually, and pay interest at 4½ per cent.

Amendment of Act necessary.

31. The Trustees would, therefore, strongly urge that in these two respects, for the reasons given above, Act II. of 1886 should be amended (*a*) to reduce the repayment of capital advances, to something like an equitable ratio to that which Bombay has to pay, due regard being given to the vast difference between the trade and indebtedness of the two ports; and (*b*) to reduce the rate of interest, which the Trustees would submit is unnecessarily high.

Total tonnage of cargo.

32. Referring to Departmental reports, the Acting Traffic Manager refers in detail to the items of increase and decrease in the Trade of the Port. The total tonnage of cargo has fallen from 436,340 tons in 1891-92 to 363,781 tons during the year under review.

Decrease in imports.

33. The chief item of decrease, in imports, is in food grain, which has fallen from 1,147,048 bags last year to 205,176 bags: and this is satisfactory, as showing that the scarcity in the surrounding districts has passed. Foreign imports have again decreased: which is attributable to uncertain exchange, and to the effects of the late scarcity.

Decrease of exports.

34. Exports show a continued falling off: due not only to the same causes as affect imports, but also to the diversion of trade from this port to foreign territory, consequent upon Railway construction within the Presidency having tended to that result.

Cranage.

35. The item Cranage, increase Rs. 32,026, is accounted for by Harbour Dues upon goods passing over the Pier, having been reduced to 12 annas per ton, from one rupee, and the additional charge for cranage being now credited separately, under that head.

Increase in imports of coal.

36. The most satisfactory item in the Traffic Manager's report is that alluding to the steady increase in coal landed at this port, which has risen from 10,000 tons in 1887-88 to 63,600 in 1891-92. This is principally due to the demand for the Gold Mines, in the Province of Mysore: and it is to be noted that the superior quality of English coal still asserts itself, over the cheaper descriptions obtainable in the country. The facilities provided by the Board have been sufficient up to date to enable the large quantities landed being stacked and despatched by rail to destination, without difficulty or delay of any sort, but additional facilities are now required and will receive attention. It must be remembered that when the present method of despatching coal was adopted, it was ascertained that the saving effected to importers was more than Rs. 2 per ton. Without this saving, and the facilities given, Madras would have been at a disadvantage in this important item of import.

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Kerosine oil imported in bulk by tank steamers.

37. Kerosine oil shows no sign of reduction: the quantity imported being 251,320 cases and 2,624 tons of bulk oil, as against 397,862 cases in 1891-92. The reduced rate at which this oil can be supplied in bulk to the various centres in the Presidency, should tend to increase imports at Madras, where every facility has been given. Special moorings have been laid down inside the Harbour, which tank steamers are permitted to enter; and the oil is pumped direct from the vessel to storage reservoirs, erected about a quarter of a mile inland, in direct communication with the Madras, and—through the Board's lines—South Indian, Railways.

Accident causing personal injury to coolies.

38. Some interesting particulars are given by the Acting Traffic Manager of the number of accidents which have occurred to coolies in the handling of cargo. Only one fatal accident took place; in this instance the injury was of so severe a nature as to necessitate amputation of a leg, the unfortunate man having been crushed between two loaded trucks. A pension of Rs 2 per mensem has been granted to the widow, from the Cooly Provident Fund: the amount being fixed by a committee of coolies and maistries, and approved and sanctioned by the Chairman: as was also the case in another instance, in which a cooly's foot was so badly injured as to permanently incapacitate him from work: in this case the pension granted is Rs. 4 per mensem. Fifty-five other accidents have occurred temporarily, rendering the coolies unable to work. In all instances they have at once been attended to by the Marine Apothecary, their wounds dressed, and they have been then sent, in charge of the police, either to the Monegar Choultry Hospital, or to the General Hospital. In the great majority of cases the injuries have been occasioned by the wheels of Pier trucks passing over the coolies' toes, or trivial injuries to legs or hands caused by packages of cargo being carelessly handled. Before the Coolies' Provident Fund was instituted, men so injured lost not only their only means of livelihood, but also lost heart, their families being without means of subsistence: and *tetanus* very frequently supervened with fatal results Now that each man injured knows that he, and his family, will at once be taken care of, none object to going to the hospitals; and except in the two serious cases of injury noted above, every man has been shortly able to resume his ordinary work. The Board contributes three pies to every rupee earned, by the coolies, to form this Provident Fund; and also deducts a similar amount from all sums paid to sub-contractors. The result has been very satisfactory: and cheerful willing labour has more than compensated for the trivial expense incurred.

Coolies Provident Fund.

Satisfactory results.

Decline in tonnage of shipping.

39. As might be expected from the decline in trade, the return of shipping entering the port shows a decrease, not only in number, but in tonnage; the figures being 731 vessels, of 1,156,233 tons net register, against 852 vessels, of 1,248,324 tons in 1891-92.

40. Port Fund and Pilotage Revenue also fell, from Rs. 1,54,078 to Rs. 1,29,172.

Accretion of sand in S. W. corner of the Harbour.

41. The Deputy Conservator reports that accretion of sand in the south-west corner of the Harbour has affected No. 1 mooring, and that this will have to be dredged. The matter is receiving the attention of the Board: and the Engineer has been called upon for a report: with a view to the services of the dredger *Wenlock* being obtained if necessary.

42. The S.S. *Caxo*, to which the Deputy Conservator refers, as having been ordered out of the Habour, to make room for other vessels, is a steamer registered under the Norwegian flag, English built and owned, which had discharged a cargo of coal, and had been lying inside the Harbour for some time in water-ballast, awaiting orders as to whither she was to proceed.

Fine weather throughout the year.

43. The weather throughout the year has been exceptionally fine; warning signals of bad weather, in the bay, having been hoisted upon one occasion only, and that for but a few hours, upon 20th October 1892.

No accidents.

44. It is satisfactory to note that no casualty, or accidents to shipping of any kind, have occurred.

Moorings in good order.

45. The moorings, both inside and outside the Habour, have been maintained in efficient condition.

Steam launch sanctioned for Harbour Masters.

46. As considerable difficulty, not unattended by danger, has again been experienced, during the North-east monsoon, by the Harbour Masters in boarding vessels outside the Harbour: the Board has sanctioned the purchase of a 37 foot steam cutter, which will be fitted as a life-boat, and is being built at the Calcutta Dockyard.

Electric time signal.

47. The time signal at the Port Flagstaff now falls at 1 P.M., instead of at 8 A.M. and at 2 P.M. as formerly: there have been only 19 irregularities during the year.

Port Diver recovery of cargo lost on board.

48. The Port Diver, when not engaged overhauling moorings, has been employed in recovering cargo lost overboard, the number of packages which have fallen into the sea, while being discharged, has been less than in former years, the water inside the Harbour being now much smoother.

Admission of explosives to the Harbour.

49. In their address to H. E. the Viceroy, the Trustees alluded to another subject, in which the Board is concerned, as Conservator of the Port; and in which capacity it has power to act only through its Deputy, the Executive Port Officer of Madras. This is the admission of explosives to the Harbour.

Address to H. E. the Viceroy.

50. The Trustees addressed H. E. as follows:—

"The feeling of the Trust is,—

(*a*) that gunpowder, the properties of which are perfectly well known, may be admitted to the Harbour, if enclosed in a properly constructed magazine, which is to remain closed while the ship is inside;

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(*b*) that ammunition, and manufactured fireworks, may be freely admitted to the Harbour, and landed or discharged therein;

(*c*) but that classes 2 to 5, of the classes as framed by H. E. the Governor-General in Council, comprising dynamite and all other explosives named in those classes, viz., Nitrate mixtures, Nitro compounds, Chlorate mixtures and Fulminates, should be absolutely excluded from the Harbour. These classes are carried only by cargo steamers, either "tramps" or foreign vessels, and the Trustees consider that they are not justified in admitting such, with large quantities of these explosives on board into the Harbour."

"Your Excellency will observe in this extract that it is only proposed to exclude classes 2 to 5: while gunpowder and ammunition will be freely admitted under proper precautions."

"We submit for Your Excellency's consideration, in connection with the rules now before the Government of India, that the above classes should not be brought into this Harbour."

Ad interim order.

51. No orders have yet been passed by Government upon this subject: and nearly one year's experience has now shown that no inconvenience is likely to result, either to the public, to shipowners, or to the Rt. Hon. the Secretary of State, by the *ad interim* order which the Board passed under the authority of G.O., Marine, No. 283 dated 4th August 1892.

Gunpowder admitted to the Harbour.

52. This order empowers the Deputy Port Conservator to admit vessels to the Harbour having gunpowder on board, provided it is enclosed in a properly constructed magazine; and under it all steamers carrying Government gunpowder, shipped by the Rt. Hon. the Secretary of State, have been admitted to the Harbour: and the Board feels confident that no danger is likely to ensue to the Harbour, and the shipping in it, in consequence.

No inconvenience occasioned by exclusion of Dynamite.

53. In G.O., Marine, No. 217, dated 18th June 1892, Government held different views from the Board, regarding classes 2 to 5, and ruled that dynamite *shall* be admitted to the Harbour; but the Board would submit that, all difficulties regarding the admission of explosives, other than those which the Trust consider should be excluded, having been removed, and experience having shown that no public or private interest is disadvantageously affected thereby, the *ad interim* order should be allowed to stand: and the rules for the importation of explosives at Madras be framed in accordance with it.

Ad interim order should be allowed to stand.

54. As "Conservator of the Port" the Board has no authority: but as recorded in G.O., Marine, No. 250, dated 13th June 1888,

The question intimately concerns the Board as a Trust under Act II. of 1886.

the Trustees, under Act II. of 1886, are a Corporate body, with powers defined by that Act: subject to the veto of H. E. the Governor in Council in certain sections only, and to control in others; and the Board would submit that though absolutely subservient to Government as Conservator, the question of the admission of explosives into the Harbour is a matter which primarily and intimately concerns it as a Trust, under Act II. of 1886; for the explosion of a large quantity of dynamite inside the Harbour would in all probability lead to results, most disastrous to the Harbour: and might moreover suddenly involve the mercantile buildings of Black Town upon the Beach road in ruin, while no local interest is served by running this risk: for explosives of this nature, for other Ports, can be shipped direct, without inconvenience to anybody, and local consignments are landed, without delay or difficulty of any sort, outside the Harbour, before the vessels enter it.

Progress of Harbour Construction.

55. A reference to the report, submitted by the Board's Engineer, will show full details of the progress made upon the reconstruction of the Harbour. The small advance made in linear feet, is disappointing; but as pointed out by the Engineer, this is due to the difficulty experienced in dredging away the old rubble base, at the Pier heads, and founding the masonry blockwork much deeper than in the ordinary section of the walls, which has also at the Pier-heads, been considerably increased in width. This additional strength has been built as suggested by Sir Alex. Rendle, when he visited Madras, as already reported.

North Pier.

56. The North Pier has, during the course of the year, been advanced 61·75 feet, made up of eleven courses of blocks; which brought the total length of this Pier, on the 31st March 1893, up to 3,753 feet, from the commencement of blockwork at the shore end. There remains a length of only 20 feet to be set, before the point is reached at which the caisson is to be set, to terminate the Pier-head.

South Pier.

57. The advance made at the south Pier-head has been less than half that attained at the north, due to the heavier work experienced upon the rubble base, and to the difference in the two titan cranes: that at the north being the new all round crane, while that at the south is one of the old type: and is not so efficient.

Blocks set at south pier.

58. The work done at the south Pier, consisted in the removal of rubble base, and the setting of 121 blocks, making five courses all of the full width and depth, at the widest and deepest section. The progress at the south Pier is therefore not so much less, than at the north, as would at first appear.

Wave-breaker screen.

59. The wave-breaker screen, at both the north and south arms, has been made up to its full section of 40 feet. 201 blocks of 30 tons each, have been deposited at the north arm: and 35 at the south, which latter were handled by the old wave-breaker crane.

Apron protection.

60. The apron protection to the rubble base inside the Harbour walls has been continued; an additional length of 309 feet being added at the north arm, and 76 feet at the south.

Block-making.

61. Only 152 concrete blocks were made during the year, which completes the number required at the Pier heads; of these 14 were special blocks required for the footing of the caissons; and in them a larger proportion of Portland Cement has been used than has been customary, the ratio being 1 in 6, and this, as suggested by Sir Alex. Rendle, will in future be used.

Cement.

62. 716 tons of cement were received from home during the year, the quantity used was 395 tons, and the stock in godown on the 31st March last was 1,578 tons, of which 516 tons have been on the works since December 1890. The Engineer reports, that this, and all other supplies since received, have recently been re-tested, and none show any signs of deterioration, owing to the length of storage. The Engineer estimates that the whole quantity will have been used by October 1894, when a further supply will be required. The Board has directed that samples of all supplies be tested chemically, to verify the results obtained by the Engineer.

Pallaveram quarries.

63. Stone from the Pallaveram quarries, has been obtained as required throughout the year: the quantity being much less than formerly, owing to the near completion of the works. The total being only 1,851 tons for block-making: and 7,079 tons for the protective revetment north of the Harbour. This revetment has been practically completed according to sanctioned estimate; but the Engineer reports that about Rs. 25,000 will have to be spent annually, until the stone has permanently settled, which he anticipates will be in about two years' time.

Protective revetment.

Erosion and accretion of sandy foreshore.

64. The erosion at the end of the new protective revetment has been less than anticipated, due possibly to its greater distance from the Harbour. The accretion of sand to the south of the Harbour has advanced seaward about 120 feet.

Depth of water inside Harbour.

65. The depth of water inside the Harbour is reported by the Engineer to remain practically unchanged, which is satisfactory. The Board will take steps to have this matter carefully watched.

Total outlay.

66. The total outlay, including the cost of the original Harbour, up to 31st March, has amounted to Rs. 1,19,38,529 against a total estimate of Rs. 1,23,83,386; this however does not include the amount which it is anticipated will be recovered by sale of tools and plant, which must be added, and brings the gross expenditure sanctioned prior to such recovery, up to Rs. 1,26,60,717.

67. The total repayments to Government have aggregated six lakhs, and the amount due by the Trust on the 31st March on account of Harbour construction amounted to Rs. 50,04,242.

Chairman.

Secretary.

HARBOUR TRUST BOARD,
MADRAS,
21*st July* 1893.

To the Hon'ble J. F. PRICE, I.C.S.,
Chief Secretary to Government.

2412/13

MADRAS HARBOUR WORKS.

ADMINISTRATION REPORT FOR THE YEAR 1892-93.

The progress made towards the reconstruction of the Madras Harbour during the official year 1892-93 has been confined to the construction of the Massive Pier Heads, for completing the Harbour, with an Eastern entrance of 520 feet in width; with a minimum depth of 39 feet of water, at De Havilland's mean sea level.

2. The general section of the Harbour walls, as far as the commencement of the Pier Heads, is 24 feet wide, and founded at 22 feet below sea level; this section has, during the official year, been widened and deepened, until a section of 38 feet wide and 40 feet deep, below sea level, has been reached; and this increased width and depth has been the cause of so small an advance, or progress apparently having been made to each Pier Head, above sea level, while in reality heavier and more difficult work has been done in founding each Pier Head, at this greater depth, owing to much of the old consolidated rubble base having to be raised by dredging, together with portions of old broken blocks, which could only be handled by Divers in smooth water, so that no comparison can be made with any of the former years' progress, as the work is of quite a different nature and has involved considerable extra labour and time; but nevertheless the general progress throughout the year has been very satisfactory.

3. A plan of the Harbour accompanies this report, shewing in neutral tint the state of the work at the commencement of the year; and in red, the work done during the year ending 31st March 1893.

4. **North Pier Head Superstructure.**—During the year a length of 61′ 9″ of the Pier Head was built, consisting of 11 courses, made up of 264 concrete blocks; of these 24 blocks, or one course was set in June, or the 1st Quarter of the official year.

5. Four courses or 97 blocks were set in the 2nd Quarter; only one course of 23 blocks was set in the 3rd Quarter, due to the necessary stoppage of 11 weeks in the Quarter for the Monsoon; and 5 courses or 120 blocks were set in the 4th Quarter ending 31st March 1893; and the rate of advance of completed work for each respective Quarter was therefore 6′ 3″, 2′ 3″, 5′ 4½″, 26′ 10½″, or a total advance of 61′ 9″ during the year.

6. The total length of the North Pier, inclusive of the Pier Head, on the 31st March 1893 was 3,753¼ feet from the commencement of the concrete blockwork in shore, leaving 20¼ feet of superstructure to be set before the point is reached, at which the caisson is to terminate the North Pier Head.

7. **Wavebreaker.**—Along the outer straight of the North arm, between the point 3,375 feet and 3,691 feet from shore, where the wave-breaker protection

had not been made up to the full section of 40 feet owing to the limited overhang of the old Titan Crane, 138 wave-breaker blocks, of 30 tons each, were deposited by the new all round Titan Crane, to the full width; and this number of blocks completed the work in accordance with the sanctioned design up to the commencement of the Pier Heads. In the 3rd Quarter, or early in October 1892, 63 wave-breaker blocks were deposited along the new length of Pier Head built, completing the wave-breaker protection up to a point 3,725 feet from the shore.

8. **Apron, or Protection to Rubble Base.**—The North Pier Rubble Base was paved or consolidated with Portland Cement concrete along the inside of the Pier, for a length of 46 feet of completed work, and an additional length of 309′ 5″ was prepared, ready to receive the concrete at the official year.

9. **South Pier Head Superstructure.**—The progress made at the South Pier, during the year, was less than half of that recorded at the North Pier, and this was owing to there being more of the rubble base to be raised by Divers, as the stone is too large to dredge, and a large quantity of it is so mixed up with portions of the old broken blocks, that no dredger can be employed, but each stone has to be removed by hand, and in addition to this difficulty, the Titan Crane at this arm is of the old type, and unsuitable to the work.

10. During the year 28′ 7½″ of the Pier Head was built at the widest and deepest section, and this progress was made by setting 5 courses, composed of 121 blocks; of this number, 24 blocks or one course was set in the 1st Quarter, 24 blocks or one course in the 2nd Quarter; none during the 3rd Quarter owing to the short working season and monsoon, and 3 courses of 73 blocks were set in the 4th Quarter ending 31st March 1893, the rate of advance of completed work each Quarter was therefore 6′ 3″, 6′ 3″ and 16′ 1½″ = 28′ 7½″.

11. The total length of the South Pier, inclusive of the Pier Heads, on the 31st March 1893 was 3,846½ feet from the commencement of the concrete blocks on shore; leaving a length of 47¼ feet of blockwork to be built before the cylindrical head is reached.

12. **Wave-breaker.**—The wave-breaker screen was continued along the new work, to the full width of 40 feet, east of the new bonded superstructure of 38 feet in width, and completed as far as the permanent work had advanced; this protection necessitated dropping 35 large blocks from the old wave-breaker crane.

13. **Apron, or Protection to Rubble Base.**—The South Pier Rubble Base was paved with Portland Cement concrete for a length of 76 feet × 20 feet wide, which brought the total length of base so protected up to 997 feet, leaving only a few feet more to complete this work up to the commencement of the South Pier Head.

14. **Concrete Blockmaking.**—During the year 152 blocks were made, which has completed the necessary number required to complete the Pier Heads. Of this number, 14 blocks were of a special shape, to act as a footing to the Caisson, and the concrete of which these blocks were made, was of a stronger mixture, being to the proportions of 1 to 6; which will be used in future in and about the Pier Heads.

2612/14

15. **Supply of Portland Cement.**—During the year Tons 716-5-0-0, of Portland Cement was received from England, and the balance from last year on hand was Tons 1,283-5-1-23.

16. The quantity of cement used during the year for all purposes was Tons 393-1-1-0, which left a balance in store on the 31st March 1893 of Tons 1,577-10-1-13.

17. Of the total quantity of cement in store, Tons 516 has been on the Works since 25th December 1890, and this cement has, with all later supplies, been recently re-tested; and there are no signs of deterioration through long stacking; as the climate of India does not affect cement, as a damp and variable one does. A shipment in March 1892 has shown an improved tensile strain upon the test it stood on arrival in India. Of the supply of cement on hand, Tons 507 will be used in February 1894 for the North Pier Caisson and the balance in the capping and setting the South Pier Caisson in October 1894, when a further supply will be required.

18. **Pallavaram Quarries.**—The quarries at Pallavaram were continued to be worked by the same Contractor throughout the year, but as the works are nearing completion, a less out-turn of stone is required each year. The total supply made during the year was therefore only 1,851¼ tons of chips for blockmaking, and 7,078¾ tons of large rubble stone for the Protective works north of the Harbour, and the whole of this supply was delivered in 42 trains, by the South Indian Railway Company.

19. **Protective Works North of the Harbour.**—A plan showing the extension of the revetment north of the Harbour, is attached to this report; and along the line of revetment marked B to C coloured red, 7,078¾ tons of large stone was during the year deposited at points where the slope had become flattened from the heavy seas which continually play upon it. There still remained at the close of the year a small balance of stone to be deposited under the already sanctioned estimate, but a further expenditure to the extent of approximately a ¼ lac a year, will have to be spent upon re-forming the slope, until it has permanently settled down, which will not be under two years hence.

20. **Foreshore South of the Harbour.**—Upon the plan of the Harbour attached to this report, are shown the high water marks of 31st March 1892, and of 31st March 1893; and there has been an advance seawards, of about 120 feet of sand close to the Pier.

21. **Sea-bottom within the Harbour.**—A complete Marine Survey of the inside of the Harbour has not been made since the year 1889, owing to bad weather generally; but several soundings have been taken in 1893, and no difference in depth could be detected. All that takes place inside the Harbour is the shifting of the High Water Line, and this is dependent upon the state of the sea inside the Harbour during the previous two or three months, and whether the sea had been smooth or not.

22. **Summary of Progress.**—The following is a summary of the progress made on the Harbour Works during the year under review.

MADRAS HARBOUR WORKS.

STATEMENT SHOWING PROGRESS DURING OFFICIAL YEAR 1892-93.

No. of Item.	PARTICULARS AND QUANTITY OF WORK, &c.	Sub-Heads of work.	North Pier Rubble Base.	North Pier Head founded at 40' below sea level	Do. Wave-breaker.	Do. Base Protection.	South Pier Rubble Base.	South Pier Head founded at 40' below sea level	Do. Wave-breaker.	Do. Base Protection.	Pallavaram Quarries out-turn.	Concrete Blockmaking.	Harbour and Protective Works Railway Lines, &c.	Total Expenditure 1892-1893.
	NOTE.—The figures in **red** denote for comparison progress and quantity of work done in official year 1891-92 when the Pier was founded at 22 to 34 feet below sea level.													
1	Total quantity Rubble stone received on Works and deposited	Tons.	**1259** ...	...	...	...	...	...	...	...	**72253** 7078¾	...	**70993** 7078¾	...
2	„ of chips „ „ „ „		...	...	...	...	...	...	..	...	**16755** 1851¼	...	...	...
3	Concrete Blocks set by Divers	Number.	...	**245** 264	...	...	...	**156** 121	...	...	..	...	...	...
4	„ „ deposited in Wave-breaker ...	„	...	...	**464** 201	...	...	...	**60** 35	...	...	...	...	...
5	„ „ made for Pier Heads ...	„	...	...	...	...	...	...	...	...	...	**720** 62	...	...
6	„ „ Wavebreaker	„	...	...	...	...	...	...	...	...	...	**272** 90	...	...
7	Wrought-iron cramps fixed in position	„	...	**30** 26	...	...	...	**16** 12	...	...	...	...	...	...
8	Total out-turn of concrete	C. yds	...	...	...	**262** 124⅛	...	...	...	**66** 84⅝	...	**15204** 2565¼	...	...
9	Advance or Progress of completed superstructure... ...	...	...	**750'** 61·9	...	...	...	**43** 28·7½"	...	...	...	...	...	...
10	Rubble Base protected with concrete	...	...	...	...	**236** 309	...	...	...	**60** 76	...	...	...	...
11	Expenditure under sub-heads of work approximately ...		4,850	55,072	3,801	11,303	1,616	26,297	1,416	4,892	10,869	50,979	43,532	2,14,627

Portland Cement.

Balance from last year	Tons	1,283	5	1	23
Received from England during year	„	716	5	0	0
Used for Blockmaking	„	379	16	1	0
Do other work	„	15	5	0	0
Balance on 31st March 1893	„	1,577	10	1	13

A. LEE POGSON,
Engineer, Harbour Trust Board.

23. **Expenditure.**—The total outlay on the Works during the past year including the expenditure on the Protective works North of the Harbour has been Rupees 2,56,019 made up as follows:—

Outlay on Works ...	...	Rs. 1,95,104
Do. on Establishment	...	„ 54,953
Do. on Tools and Plant	...	„ 41,098
		2,91,155
Net debits to Suspense Heads...	...	„ 35,136
Net outlay in the year	...	...Total Rs. 2,56,019

The total expenditure up to the end of the official year was Rs. 1,19,38,529 against the total estimated cost of Rs. 1,23,83,386.

24. **Miscellaneous.**—During the year, a new building was designed and erected, at a cost of Rs. 6,902 as the Harbour Masters' Offices on the Beach, at the site shown upon the accompanying plan.

25. The whole of the Machinery, Cranes, and Trucks, &c., were kept in working order for the Traffic Department, and all haulage was done by the Harbour Works Locomotives.

A. LEE POGSON, M.I.M.E., A.M.I.C.E.,
Engineer, Harbour Trust Board.

HARBOUR WORKS OFFICE,
MADRAS, 29*th May* 1893.

MADRAS HARBOUR WORKS.

COMPARISON OF EXPENDITURE TO DATE WITH SANCTIONED ESTIMATE FOR THE YEAR ENDING 31st MARCH 1893.

Sub-head of Work.	As per Estimate Sanctioned in Secretary of State Despatch No. 1, dated 7th January 1892.				As Executed.					Arrears not paid.	Value of work done up to date, columns 11 and 12.	Remarks.
	Quantity.	Rate.	Per.	Cost.	Total.	Quantity.	Rate.	Expenditure. Total up to end of last Year.	During the Year.	Up to date.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Expenditure up to 31st December 1884.		Rs. A. P.		Rs.	Rs.		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
1 Works	.....	... ...	...	55,09,324	...		... ...	55,09,324 8 10	... ...	55,09,324 8 10	... ...	55,09,324 8 10	
2 Establishment	.....	... ...	...	5,29,904	...		... ...	5,29,904 0 0	... ...	5,29,904 0 0	... ...	5,29,904 0 0	
3 Tools and Plant	.....	... ...	...	5,15,262	...		... ...	5,15,262 6 0	... ...	5,15,262 6 0	... ...	5,15,262 6 0	
Total...	.....	... ...	...		65,54,490		... ...	65,54,490 14 0	... ...	65,54,490 14 10	... ...	65,54,490 14 10	
Revised Estimate.													
4 Alteration and extension of block ground ...Prely...	.....	... ...	...	5,892	5,892		... ...	5,882 3 5	... ...	5,882 3 5	9 13 6	5,892 0 11	
North Pier.													
5 Ordinary rubble deposited from breakwater. Tons	13,930	1 12 0	Ton	24,378		13,930	1 12 0	24,337 9 0	... ...	24,377 9 0			
6 Do from boats	2,06,896	2 0 5	,,	4,19,218		2,08,362	2 1 5	4,25,750 4 3	5,216 4 0	4,30,966 8 3	... ...	24,377 9 0	
7 Concrete blocks for building ... ... C. yds.	51,320	11 8 0	C. yd.	5,90,110		48,349	11 14 1	5,18,225 5 10	56,029 0 6	5,74,254 5 10	4,404 12 2	4,35,371 4 5	
8 Setting blocks at commencement of new work	2,615	2 1 1	,,	5,415		2,615	2 1 1	5,414 11 2	... ...	5,414 11 2	... ...	5,75,254 5 10	
9 Do. from 2,200 to 3,600 feet ...	36,520	2 14 3	,,	1,05,569		36,447	2 15 9	1,08,813 14 8	... ...	1,08,813 14 8	... ...	5,414 11 2	
10 Do. at Pierhead	12,185	9 8 11	,,	1,16,422		9,808	8 13 0	46,499 3 4	33,119 1 6	79,615 4 10	2,414 2 6	1,08,813 14 8	
11 Concrete in mass for filling	263	4 8 3	,,	1,188		263	4 8 3	1,188 0 7	... ...	1,188 0 7	... ...	82,029 7 4	
12 Wavebreaker blocks	288	9 5 7	,,	2,692		288	9 5 7	2,692 0 0	... ...	2,692 0 0	... ...	1,188 0 7	
13 Do. concrete blocks	77,355	10 14 11	,,	8,45,591		67,095	11 6 4	7,14,714 3 2	48,879 0 0	7,63,593 3 2	... ...	2,692 0 0	
14 Depositing do.	77,932	1 0 0	,,	77,928		67,599	1 0 3	62,298 14 9	6,327 11 3	68,626 10 0	... ...	7,63,593 3 2	
15 Concrete in protection to Rubble Base ...	1,986	10 4 1	,,	20,385		1,212	16 4 7	8,262 3 3	11,407 11 8	19,669 14 11	9 7 8	68,636 1 8	
16 Cramps, Iron ... ... No.	331	9 10 1	Each	3,188		301	8 0 7	2,361 5 8	58 0 0	2,419 5 8	69 5 8	19,739 4 7	
17 Concrete capping ... ... C. yds.	16,352	11 3 10	C. yd.	1,83,798		573	19 13 10	11,393 14 7	... ...	11,393 14 7	... ...	2,419 5 8	
18 Cost of North Pier Caisson and setting in position and filling same as items 26, 27, 33 and 34 ... ... ,,	.....	... ...	,,	81,750		...	... ...	... ...	20,773 3 6	20,773 3 6	... ...	11,393 14 7	
Total for North Pier ...	.....	... ...	...	...	24,80,697			19,31,991 10 3	1,81,806 15 11	21,13,798 10 2	6,897 12 0	20,773 3 6	
South Pier.												21,20,696 6 2	
19 Ordinary rubble depoited from boats ... Tons.	1,75,078	2 9 0	Ton	4,49,052		1,70,774	2 9 10	4,39,618 7 8	2,050 1 4	4,41,668 9 0			
20 Large do. deposited from breakwater... ,,	8,615	1 12 0	,,	15,076		8,615	1 12 0	15,075 13 0	... ...	15,075 13 0	4,925 14 8	4,46,594 7 8	
21 Concrete blocks for building ... ... C. yds.	45,066	11 3 1	C. yd	5,04,519		40,481	11 4 8	4,30,903 10 10	26,216 13 1	4,57,120 7 11	... ...	15,075 13 0	
22 Setting blocks at commencement... ... ,,	2,556	3 1 6	,,	7,912		2,556	3 1 6	7,911 13 3	... ...	7,911 13 3	... ...	4,57,120 7 11	
23 Do. from 2,550 to 3,700 feet ... ,,	30,160	3 7 11	,,	1,05,461		30,160	3 7 11	1,05,461 9 4	... ...	1,05,461 9 4	... ...	7,911 13 3	
24 Do. at Pirehead ... ... ,,	7,764	14 4 5	,,	80,818		7,764	14 4 5	80,818 5 3	26,977 11 4	1,07,796 0 7	3,041 12 5	1,10,837 13 0	
25 Concrete in mass for filling ... ... ,,	602	7 9 1	,,	4,555		602	7 9 1	4,554 14 4	... ...	4,554 14 4	... ...	4,554 14 4	
26 Do. in Cylindrical Pierhead ... ... ,,	2,355	15 0 0	,,	35,325		...	... ...	... ...	... ...	... ...	... ...	... ...	
27 Do. in filling in between Coursed Block-work and Caisson ... ... ,,	.....	... ...	,,	28,665		...	... ...	... ...	... ...	... ...	... ...	... ...	
Total for South Pier ...	.....	... ...	...	...	21,00,826			16,12,603 9 4	70,371 9 7	16,82,975 2 11	7,967 11 1	16,90,942 14 0	
Extending the Rubble Revetment protecting the foreshore North of Harbour.													
28 Wavebreaker concrete blocks ... ... ,,	184	15 0 0	,,	2,760		...	... ...	... ...	... ...	... ...	... ...	... ...	
29 Depositing do. do. ... ... ,,	47,231	11 3 6	,,	5,24,070		38,754	11 3 8	4,26,839 9 7	8,413 2 4	4,35,252 11 11	... ...	4,35,252 11 11	
30 Concrete in protection to Rubble Base ... ,,	47,714	1 5 8	,,	64,708		39,237	1 6 0	53,619 7 2	1,434 8 2	55,053 15 4	... ...	55,053 15 4	
31 Cramps, Iron ... ... No.	1,700	9 10 6	,,	16,420		1,107	13 6 11	9,988 11 0	4,892 0 10	14,880 11 10	... ...	14,880 11 10	
32 Concrete capping ... ... C. yds.	259	11 7 7	Each	2,972		214	10 12 1	2,259 0 1	43 2 3	2,302 2 4	... ...	2,302 2 4	
33 Iron Caisson ... ... No.	16,247	11 5 8	C. yd.	1,84,495		669	21 2 4	14,116 0 4	... ...	14,146 0 4	... ...	14,146 0 4	
34 Preparing Base for and setting Cylindrical Pierhead ... ... ,,	1	... ...	,,	18,000		...	... ...	21,406 3 6	344 2 7	21,750 6 1	... ...	21,750 6 1	
Total for South Pier ...	.....	... ...	...	...	28,665	...	... ...	... ...	... ...	... ...	... ...	... ...	
35 Rubble Stone Revetment ... ... Tons	70,600	2 1 0	Ton	1,45,613		81,817	1 8 11	1,09,449 0 8	11,498 1 4	1,20,947 2 0	6,460 9 7	1,27,407 11 7	
36 Railway Lines	.....	... ...	...	9,849		...	... ...	8,746 1 1	2,168 9 9	10,914 10 10	... ...	10,914 10 0	
					1,55,462			1,18,195 1 9	,666 11 1	1,31,861 12 10	6,460 9 7	1,38,322 6 5	
37 Tools and Plant	.....	... ...	...	...	6,11,656			5,88,763 3 0	53,607 2 8	6,42,370 5 8	508 15 4	6,42,879 5 0	
38 Contingencies	.....	... ...	...	...	2,17,415			1,70,677 3 4	9,708 4 6	1,80,385 7 10	7,242 2 10	1,87,627 10 8	
39 Establishment	.....	... ...	...	...	5,34,369			4,77,694 11 6	54,952 12 5	5,32,647 7 11	... ...	5,32,647 7 11	
40 Materials at site (concrete blocks in yards)... C. yds.	.....	... ...	...	...	...	11,359	14 7 1	2,39,329 13 5	—80,592 14 10	1,58,736 14 7	5,211 5 4	1,63,948 3 11	
41 Advance to work people	.....	... ...	...	...	...			5,873 11 9	143 4 0	6,016 15 9	... ...	6,016 15 9	
Total of Estimate and value of work done ...					61,06,227			51,51,011 3 9	3,03,663 13 4	54,54,675 1 1	34,298 5 8	54,88,973 6 9	
Deduct Probable recoveries due to sales of Tools and Plant	.....	... ...	...	...	2,77,331			—58,128 1 6	—12,508 9 11	—70,636 11 5	... ...	—70,636 11 5	
Total ...	.....	... ...	...	...	58,28,896			50,92,883 2 3	2,91,155 3 5	53,84,038 5 8	34,298 5 8	54,18,336 11 4	
Total of revised Estimate sanctioned in Secretary of State Despatch, plus expenditure before 31st December 1884	.....	... ...	...	...	1,23,83,386			1,16,47,374 1 1	2,91,155 3 5	1,19,38,529 4 6	34,298 5 8	1,19,72,827 10 2	
Estimated Cost of additional works found necessary up to end of last Quarter	.....	... ...	...	...	...								
Estimated Cost of additional works found necessary during Quarter ending	.....	... ...	...	...	...								
Total Estimated Cost for Completion of Works ...	.....	... ...	...	...	1,23,83,386								
Deduct Total Expenditure as per column 11 ...	.....	... ...	...	...	1,19,38,529								
Total Estimated Cost of Completing Work after Quarter ending 31st March 1893	.....	... ...	...	...	4,44,857								

Expenditure up to 31st March 1892 from commencement of Works ... Rs. 1,16,47,374-1-1
Do. during current official year from 1st April 1892 to 31st March 1893 ... Rs. 2,91,155-3-5

Grant for 1892-93 Rs. 5,77,500

Total outlay to 31st March 1893... Rs.... 1,19,38,529-4-6

Madras,
29th April 1893.

G. MOOTHOOSAWMY NAIDU,
Accountant,
M. H. Works Office.

A. LEE POGSON,
Engineer, Harbour Trust Board.

9
2412/94

2412/18

To

THE SECRETARY,
HARBOUR TRUST BOARD,
Madras.

SIR,

I have the honor to submit the following report, of work done in the Traffic Department of the Madras Harbour, for the year ending 31st March 1893.

2. The receipts for the year under report, excluding contribution from Port Funds, Interest on Government Pro. Notes, and Porterage receipts (which latter item will be dealt with separately) are Rs. 3,20,787-12-2 against the estimated sum of Rs. 2,88,000, so that the actual collections exceeded the estimate by Rs. 32,787-12-2. The details are as follows:—

	Estimated.			Actuals.		
	RS.	A.	P.	RS.	A.	P.
Imports	1,55,000	0	0...	2,08,381	10	5
Exports	60,000	0	0...	64,453	8	0
Cranage	30,000	0	0...	32,174	14	10
Wharfage	6,000	0	6...	6,466	5	4
Storage	2,000	0	0...	2,572	13	11
Rent on H. T. Properties	1,000	0	0...	1,248	12	0
Water Collections ...	3,000	0	0...	3,736	12	0
Fines under Section 84	...		...	39	0	0
Miscellaneous	1,000	0	0...	1,713	15	8
Total Rs....	2,88,000	0	0...	3,20,787	12	2

3. The estimated and actual receipts during the past five years have been as follows :—

Years.	Estimated.			Actuals.		
	RS.	A.	P.	RS.	A.	P.
1892-93 ...	2,88,000	0	0	3,20,787	12	2
1891-92 ...	3,43,500	0	0	3,88,426	6	10
1890-91 ...	2,99,000	0	0	3,59,382	8	1
1889-90 ...	3,06,200	0	0	3,26,746	11	11
1888-89 ...	2,73,350	0	0	2,66,966	13	2
1887-88 ...	2,96,300	0	0	2,96,583	10	11

4. The receipts for the year shew a decrease against 1891-92 of Rs. 67,638-10-8; 1890-91 of Rs. 38,594-11-11; 1889-90 of Rs. 5,958-15-9; and an increase against 1888-89 of Rs. 53,820-15-0 and 1887-88 of Rs. 24,204-1-3. The receipts when compared with the average of the past 5 years shew a decrease of Rs. 6,833-7-7.

5. The following is a statement of the different sources of Revenue for the past six years.

Receipts.	Years.											
	1887-88.		1888-89.		1889-90.		1890-91.		1891-92.		1892-93.	
	Rs. A. P		Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.	
(a) Harbour Dues, Imports ..	1,79,799	15 3	1,72,480	14 7	2,07,098	14 7	2,41,441	0 6	2,85,070	13 4	2,08,381	10 5
(b) Do. Exports.	93,145	10 2	78,568	1 7	1,00,945	7 6	92,289	10 10	80,716	1 10	64,453	8 0
(c) Wharfage ...	13,530	10 10	8,574	5 1	10,225	0 4	12,469	18 4	7,971	3 7	6,466	5 4
(d) Storage ...	3,609	2 5	2,773	4 6	2,836	0 0	3,444	0 0	2,923	0 0	2,752	13 11
(e) Rent of Trust Properties ..	4,902	0 9	3,246	0 3	2,945	11 1	2,186	2 5	1,773	12 1	1,248	12 0
(f) Water Collections ...	...		...		...		...		3,091	4 0	3,736	12 0
(g) Cranage ...	...		...		...		...		149	1 7	32,174	14 10
(h) Miscellaneous..	1,596	3 6	1,324	3 2	2,965	10 8	7,561	13 0	6,731	1 7	1,752	15 8
Total...	2,96,583	10 11	2,66,966	15 2	3,26,746	11 11	3,59,382	8 1	3,88,426	6 10	3,20,787	12 2

(a) *Imports.*—The large decrease of Rs. 76,689-2-11 compared with the year 1891-92 is chiefly due to the heavy rate of exchange in sterling money and the consequent dulness in the Foreign Import Trade, also the fall in food grain traffic, which was 941,872 bags short of last year's landing. The number of bags landed being 205,176 against 1,147,048 of 1891-92. A considerable quantity appears to have been conveyed to the Ceded and Famine-stricken districts by rail from the North, from Seethanagar and Bezwada *vid* Guntakul, whereas during the previous years, food grains were brought by sea to this port and hence by rail to the respective districts. This loss in the food grain traffic was to a certain extent compensated by the large importations of coal from Foreign and Coast ports, otherwise the actual deficit, in Imports alone for the year under review, would have been nearly a lakh and a quarter rupees.

(b) *Exports.*—*Decrease Rs.* 16,262-9-10 is due to the want of rain for the last three years and the consequent failure of crops, and also to the conveyance of cotton by rail direct to Bombay, from the interior and thence shipped. The number of bales shipped from this port this year being only 26,140 against 48,202 of the preceding year 1891-92. It will also be observed that ground-nuts, instead of being sent to this port for shipment, as formerly, were mostly shipped from Pondicherry and Cuddalore. The number of bags shipped from hence this year being 26,209 only, against 93,132 last year; 190,320 in 1890-91; and upwards of two lakhs in 1889-90.

(c) *Wharfage.*—*Decrease Rs.* 1,504-14-0. Since the issue of Notification of Government, No. 120, Marine, dated 21st April 1892, the merchants have taken the precaution to have their goods removed sooner than previously, so as to avoid the accruing of heavy rents. The dulness of the Foreign Import Trade and also of the Import Timber Traffic has to a certain extent been the cause of the non-accrual of rent.

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(d) *Storage.*—*Decrease Rs.* 170-2-1. The issue of the above Notification combined with the dulness of the Import Trade account for this decrease.

(e) *Rent of Trust Properties.*—*Decrease Rs.* 525-0-11. Since the report for the year 1891-92 several huts and houses have been demolished owing to the encroachment of the sea and a few of the tenants who were quite unable to pay their rents, being paupers, vacated the huts and the sums due by them not recovered. In one instance a tenant, who rented the market, owed nearly Rs. 300 to the Trust, was sued and put in jail for 6 months, but to no effect, as nothing was recovered from him, and thus a few items had to be written off. It is likely that these rents will gradually decrease year after year. The amount of timber landed this year was 10,595 tons against 15,737 tons of last year, and this is a further cause of the decrease in the rents.

(f) *Water Collections.*—*Increase Rs.* 645-8-0. This is due to the improved condition of the water pipes attached to the pier and the increased number of water boats, with which we are able to cope with the requirements of the shipping at this port.

(g) *Cranage.*—*Increase Rs.* 32,025-13-3. This item was included last year under the head of "Pier Imports and Exports," but since the Notification, No. 120, Marine, dated 21st April 1892, it has been treated as a separate head of revenue.

(h) *Miscellaneous.*—*Decrease Rs.* 4,978-1-11. In 1891-92 unserviceable articles, planks, iron tie bars and rods, &c., removed from the screw-pile pier which was thoroughly repaired, were sold at a public auction, and the sale proceeds credited under this head, while no such sale has been required this year.

6. The Import and Export Traffic at this Port during the past six years is as follows:—

Years.	Pier.			Beach.			Grand Total.
	Import.	Export.	Total.	Import.	Export.	Total.	
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1887-88... ...	86,258	54,562	140,820	124,721	51,445	176,166	316,986
1888-89... ...	85,133	47,262	132,395	116,464	41,741	158,205	290,600
1889-90... ...	88,419	66,208	154,627	158,240	46,317	204,557	359,184
1890-91... ...	100,154	58,855	105,905	188,383	44,580	232,953	391,972
1891-92... ...	97,987	56,046	154,033	249,414	32,893	282,307	436,340
1892-93... ...	80,339	55,514	135,853	197,504	30,424	227,928	363,781

7. *Coal.*—18,848 tons of coal have been landed this year in excess of last year, and this is owing to the increased operations in the Gold Fields and also to the increased quantity of coal, brought from Calcutta, which is being used by the Railways and Local Workshops.

The tonnage of coal landed for the past six years is shewn below.

Year.	Coal	Coke.	Patent Fuel.	Total.
	Tons.	Tons.	Tons.	Tons.
1887-88 ...	10,000	608	4,884	15,942
1888-89 ...	21,645	997	6,443	29,085
1889-90 ...	23,970	645	9,753	34,368
1890-91 ...	41,888	1,389	5,613	48,890
1891-92 ...	47,010	2,017	...	49,027
1892-93 ...	63,600	1,322	2,953	67,875

From the above figures, it will be observed that the importation of coal has been gradually increasing. The improvements made in the yard on the North Beach, by the laying of broad and narrow gauge lines, have tended to expedite the removal of goods from several parts of the Harbour without entailing the extra exhorbitant charges for cart hire. These facilities have induced consignees to import larger quantities of coal, hence the rapid growth in this traffic year after year.

8. *Kerosene Oil.*—This trade has also been gradually increasing, 251,320 cases and 2,624 tons in bulk, were imported this year against 397,862 cases in 1891-92; 345,000 in 1890-91; 248,505 in 1889-90; 248,024 in 1888-89; and 86,489 in 1887-88. Messrs. Best & Co. have constructed large depôts with tanks to hold about 3,000 tons in bulk in the Royapuram Railway Terminus compound, with pipes, leading from the shipping to the tanks direct, just by the side of the wall of the Northern groyne.

The development of this enterprisement will tend to the cheapness of oil and the consequent increased consumption, which will necessitate larger importations. Several depôts are also now being constructed by Messrs. Best & Co., in the suburbs of the town, and in the mofussil, and there is every probability of this trade soon becoming a very extensive one.

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9. *Screw Pile Pier.*—This structure fitted with machinery, cranes, steam cranes, &c., to cope with the landing requirements of this Port, yet the work done during the year has been backward, the out-turn being 124,926 tons against 154,033 tons of last year, shewing a decrease of 29,107 tons owing to want of cargo trade being very dull in general merchandise.

During the years 1887-88 and 1891-92 the Pier traffic steadily increased, but there was a slight fall in 1888-89.

The following statement shews the Revenue collected on goods passed over the Pier during the past six years.—

Years.	Imports.			Exports.			Total.		
	RS.	AS.	P.	RS.	A.	P.	RS.	A.	P.
1887-88 ...	86,256	8	9	54,561	8	1	1,40,820	1	6
1888-89 ...	85,132	14	2	47,261	11	3	1,32,394	9	5
1889-90 ...	88,418	12	9	66,207	15	-	1,54,626	11	10
1890-91 ...	1,00,154	7	6	58,854	10	3	1,59,009	1	9
1891-92 ...	97,987	10	0	56,046	6	6	1,54,034	0	6
1892-93 ...	78,550	2	1	55,514	2	7	1,34,064	4	8

The average annual receipts under this head, as worked out from 1887-88 to 1891-92, are Rs. 1,48,177 which, when compared to that of the year under review, shews a deficit of Rs. which is owing, as has already been stated, to the heavy rate of exchange, the fall in grain traffic, and the decrease in export trade.

10. *Overtime Work.*—During the year under report the work done after hours, on Sundays, and holidays was as follows :—

Days.	Tonnage of Goods landed and shipped.	No. of packages delivered to consignees.
51 Sundays ...	31,038	4,324
23 Holidays ...	25,166	19,252
167 Nights ...	10,277	...
Total ...	66,481	23,578

From the above statement it will be observed that the Traffic Establishment was well engaged throughout the year, having had in addition to their every day's work (from 6 A.M. to 6 P.M.) to work after hours and every Sundays, one Sunday only excepted.

The proportion of work done during those extra hours when compared with that done during the year under review is as follows :—

Total tonnage for the year	...	3,50,447	
Sundays, Tons	...	31,088	
Holidays, „	...	25,166	
After hours, „	...	10,277	
		66,531 Tons.	
Amount of overtime fees paid to Establishment during the year		Rs. 7,468	0 0
Amount of Establishment	...	„ 52,938	0 0

11. *Porterage Work.*—The receipts under this head for 1892-93, Rs. 1,02,150-11-8 against Rs. 1,08,322-14-6 of last year, shew a decrease of Rs. 6,172-2-10, which is due to the dulness in Foreign trade. With the various improved methods as shewn in last year's report the porterage work has been going on very satisfactorily as will be seen from the following :—

Amount of Budget allotment on account of Claims ...	...	Rs. 1,500 0 0
Amount paid towards this	...	„ 791 0 0
While that paid during the year 1891-92 being ...	...	„ 2,012 0 0

The work in this branch was a trying one during the year owing to the importation of large consignments of coal and iron, which on several occasions were landed simultaneously, laid a heavy strain on the staff as well as the coolies, but withal the work has been satisfactorily done to all concerned. The receipts and expenditure effected under the head of Porterage during the year are as follows :—

Cash Receipts, 1892-93		Rs. 1,02,150	11 8
Expenditure, do.		„ 75,935	6 6
Balance to credit...	Rs.	26,215	5 2

This year during the course of work 57 coolies were wounded, viz., 25 in the Customs yard, 16 on the North Beach, 13 on the South Beach, and 13 on the Pier. Of these, one was very severely hurt, who after an elapse of 3 months died in the Hospital, and his widow has been granted a monthly pension of 2 rupees from the Cooly Provident Fund. Another also had one foot seriously injured and became incapacitated for work, to whom also a monthly pension of Rs. 4 has been granted from the same fund, the other 55 coolies have all recovered and returned to work, the injuries received being all of a slight nature. These men all received an allowance of 4 annas a day from this Fund until they were fit to resume work.

12. *Iron.*—The handling of iron, including removal, sorting, piling by marks, when visible, &c., were done under the improved system of working by counter-tally and has been satisfactory, so much so that during the year there were no shortages or misdeliveries or claims thereby, nor were the consignees in the least dissatisfied.

13. *General Cargo.*—The improved method of damage Chit system in tallying broken packages, &c., has to a very great extent avoided claims from consignees and thus rendered every satisfaction to the merchants and a considerable saving to the Trust under the head of "*Claims.*"

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14. *Explosives.*—During the year under review 13,972 packages of gunpowder, blasting gelatine, dynamite, and detonators were landed at Cassimode and conveyed to the merchants' magazines. Arrangements for a magazine close by the beach at Cassimode is now under contemplation for the better safety and convenience of the public.

15. I have to record with deep regret that during the year one of the Senior Preventive Officers, Mr. R. P. Collins, met with a fatal accident while working on board the B. I. S. N. Co.'s Steamer "Taroba," a sling of bales in the act of swinging over the ship's side jammed him against the bulwarks, resulting in immediate death. The widow was granted a compassionate allowance of Rs. 300. *Vide* G.O., No. 3, Marine, dated 9th January 1893, and the son entertained in his place.

16. Mr. Hutchence, the Traffic Manager, having proceeded to Australia on one year's furlough, I, in the capacity of Ag. Traffic Manager, have much pleasure in acknowledging the services rendered by the Staff in general, and the hearty co-operation of the Executive Officers, who have all worked zealously and with harmony throughout the year.

17. Appended are eight statements, showing the quantities of goods landed at, or shipped from this port, during the past five years, *viz.* :—

Appendix.—I. Goods imported from Foreign Ports.
II. Stores imported by the Madras Railway Company.
III. Stores imported by the South Indian Railway Company.
IV. Goods imported from Coast Ports.
V. Goods exported to Foreign Ports.
VI. Goods exported to Coast Ports.
VII. Stores, &c., imported by Government.
VIII. Stores, &c., exported by Government.

I have the honor to be,
Sir,
Your most obedient servant,

G. R. P. LLOYD,
Ag. Traffic Manager,
Harbour Trust Board.

TRAFFIC MANAGER'S OFFICE,
HARBOUR TRUST BOARD,
MADRAS, *May* 1893.

I. STATEMENT OF GOODS IMPORTED FROM FOREIGN PORTS.

—	Packages.	1888-89.	1889-90.	1890-91.	1891-92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93.
Apparel and Effects ...	Packages...	1,368	1,217	851	1,347	212	154	429	273	1,068
Alum	Barrels ...	496	504	1,233	326	156	50	378	102	686
Asphalte, Tar, & Pitch.	Casks ...	2,797	3,133	3,623	4,439	913	392	596	428	2,329
Acids	Cases ...	1,484	775	1,362	1,854	799	304	129	176	1,408
Arms and Guns ...	„ ...	516	235	126	442	122	28	49	12	221
Arrack	Casks ...	832	773	346	884	146	312	247	128	833
Blankets... ...	Bales ...	25	36	58	119	4	16	143	5	168
Beef and Pork ...	Cases ...	2	...	...	36	...	...	...	...	...
Bricks ...	100 ...	420	1,497	222	1,021	170	...	231	150	551
Beer	Cases ...	6,697	5,664	6,606	6,123	2,242	2,312	1,841	2,315	8,710
	Barrels ...	2,160	935	110	1,140	639	138	433	497	1,707
	Hogsheads	4,424	3,649	8,217	6,808	2,517	1,579	2,159	1,985	8,210
Boiler	No. ...	33	19	32	51	7	6	10	9	32
Corks	Bundles ...	191	133	88	88	14	13	18	27	72
Canvas	Bales ...	140	77	244	121	59	38	34	62	193
Candles	Cases ...	14,278	20,539	18,515	16,637	8,329	9,047	7,366	6,275	31,017
Colours	„ ...	1,980	1,056	2,698	3,838	465	1,147	1,177	497	3,286
Confectionery Provisions and Oilmanstores	„ ...	17,042	14,214	17,896	23,395	5,047	4,253	8,321	4,468	22,129
Crockery & Glassware.	Crates & Casks.	2,942	3,018	4,099	4,538	1,104	739	802	1,172	3,817
Chalk ...	Barrels ...	377	95	178	370	15	50	25	50	140
Cement ...	Casks ...	17,203	8,868	7,049	14,522	4,315	1,430	968	656	7,369
Cast Iron Pipes and Tubes ...	Tons ...	683	1,009	950	335	435	370	376	255	1,436
Camphor ...	Tubs ...	2,675	1,560	1,556	4,739	1,091	1,132	1,067	1,559	4,349
Coal, Coke and Fuel ...	Tons ...	13,773	11,992	16,688	...	...	...	...	...	...
Coal ...	...	...	...	...	33,686	17,283	10,494	11,265	10,466	49,508
Coke	„ ...	...	...	...	578	101	510	130	637	778
Fuel ...	„ ...	...	...	...	...	...	...	724	115	2,953
Crackers... ...	Cases ...	879	975	1,134	470	...	90	109	145	1
Copper Plates and Tiles	No. ...	498	5,012	1,594	4,802	506	486	845	177	840
Corrugated Iron ...	Packages...	51	449	2,913	805	3,220	310	405	676	521
Dynamite ...	Cases ...	4,998	6,450	9,230	13,040	220	376	920	4,100	2,512
Earthenware ...	Crates ...	2,104	794	1,913	2,318	56	...	148	370	8,035
Fire Clay ...	Casks ...	234	147	23	2,768	296	275	171	68	1,886
Flour	Bags and Barrels.	483	675	367	1,317	3	9	9	79	272
Flannel ...	Bales ...	74	23	58	54	1,100	2,608	387	9	821
Gunpowder ...	Packages...	476	962	1,746	6,667	...	3	14	1,892	30
Harmoninm ...	Cases ...	4	11	9	30	1,906	1,331	1,068	10	5,987
Hardware ...	Cases & Casks..	4,247	2,924	3,954	8,234	19	17	8	2,478	6,783
Hops ...	Packages	269	115	129	129	6,946	4,923	1,861	20	64
Iron	Tons ...	17,771	12,762	18,138	13,737	90	36	10	4,199	17,929
Iron Safes ...	No. ...	577	343	241	296	...	...	...	14	150
Kerosine Oil	Cases ...	248,024	248,505	345,000	397,862	28,400	25,835	82,664	1,14,421	2,51,320
Lime Water	Tons ...	...	...	...	...	...	...	...	3,361	3,361
Malt ...	„ ...	108	31	45	...	...	...	...	...	...
Millinery and Haberdashery ...	Bags ...	565	609	354	445	88	300	7	12	407
Matches	Cases ...	1,640	1,393	1,356	1,609	233	551	452	330	1,566
Machinery ...	„ ...	11,739	4,928	7,916	10,665	2,639	2,277	1,579	2,630	9,125
Nails	Tons ...	1,752	1,799	1,600	3,099	886	707	678	970	3,241
Oil and Turpentine ...	Kegs ...	19,256	4,409	13,287	13,744	4,471	664	2,237	3,175	10,547
	Drums ...	6,984	8,863	6,942	7,225	2,365	1,903	1,680	952	15,500
Piece Goods ...	Piece Goods	105,495	97,383	82,649	85,079	12,281	11,045	13,477	14,748	51,551
	Twist.					5,000	4,282	5,706	3,676	18,664
Paper ...	Cases&Bales								1,512	5,518
	Bales ...	3,236	3,988	4,646	6,546	1,857	1,021	1,128	9	

STATEMENT OF GOODS IMPORTED FROM FOREIGN PORTS—*continued.*

—	Packages.	1888-89.	1889-90.	1890-91.	1891-92.	Quarter ending 30th June 1892	Quarter ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Total for 1892-93
Piano	No.	102	135	123	153	28	28	25	18	99
Printing Types	Cases	330	348	263	492	409	138	112	68	727
Pig Lead	No.	1,895	2,647	1,420	2,198	266	342	309	181	1,097
Paint	Kegs	7,837	7,945	7,457	7,758	3,833	3,652	1,140	1,632	10,257
Rattan	Bundles	949	6,527	883	3,823	2,117	662	573	2,317	5,669
Soaps	Cases	2,075	2,191	1,996	1,650	172	140	210	448	970
Salt	,,	488	620	225	383	104	30	115	80	329
Steel	Cases & Casks	921	3,577	874	864	281	188	1,278	1,596	3,343
Steel Bundles and Bars	No.	...	...	5,746	11,261	3,836	421	2,508	3,636	10,401
Steel Hoop	Bundles	...	...	12,566	5,567	1,189	...	...	408	1,597
Shovels	,,	173	13	747	275	197	209	35	58	499
Sodawater Bottles	Crates	846	997	840	1,395	462	489	473	344	1,768
Sulphur	Casks	825	831	633	752	335	66	34	...	435
Shot	Kegs	220	348	240	177	...	1	20	35	56
Sundries	Packages	32,262	39,934	48,364	48,408	6,143	5,947	11,490	10,026	33,606
Specie	No.	1,330	1,541	1,115	1,229	253	203	208	224	888
Sugar	Bags	...	...	2,250	2,152	248	20	774	154	1,196
Slates and Pencils	Cases	1,389	645	1,101	1,242	161	248	160	279	848
Spelter	Cakes	13,343	3,255	11,342	836	2,144	...	3,266	3,376	8,786
Saw	Cases	34	7	68	70	30	4	6	8	48
Twine and Rope	Bales & Coils	71	221	183	438	65	26	339	25	455
Tin Plates	Boxes	4,194	3,771	4,994	5,608	845	600	866	2,338	4,649
Wine and Spirits	Cases	45,173	46,479	40,857	37,877	10,793	11,896	10,057	11,993	44,739
	Casks	2,094	3,240	2,739	863	111	327	32	188	658
	Puncheons	256	392	149	369	109	54	332	238	733
Window Glasses	Cases	1,987	5,158	8,297	5,972	2,779	2,705	1,579	4,937	12,000
White and Red Lead	Kegs	859	969	495	681	144	213	319	275	951
Yellow Metal	Cases	907	2,722	4,309	3,076	451	447	1,139	1,324	3,361
Zinc Sheets	Packages	1,221	1,174	595	2,749	476	371	361	482	1,690
Horses	No.	837	696	611	816	3	297	336	323	959
Ponies	,,	3	6	17	70	3	53	32	24	112
Cows	,,	5	5	...	59	...	5	6	4	15
Dogs	,,	14	13	10	18	...	...	3	11	14
Elephants	,,	...	1	25	10	...	...	...	7	7
Two-wheeled Carriage	...	...	...	...	...	...	4	4	...	8

II.

STATEMENT OF STORES IMPORTED BY THE MADRAS RAILWAY COMPANY.

—	Packages.	1888-89.	1889-90.	1890-91.	1891-92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93.
Stores	Packages	84,697	81,723	51,879	82,165	13,429	2,111	7,293	49,601	72,434
Fuel	Tons	...	...	...	...	...	...	110	...	...
Coke	,,	5,587	171	467	3,605	389	...	...	...	499
Coal	,,	997	9,753	4,673	...	...	...	...	403	544
Timber	,,	52	645	839	1,437	141	...	...	360	360
Fire Brick	100	1,622	2,702	4,301	27	...	...	...	1,399	2,083
	...	141	1,483	3,800	2,477	569	42	73	232	330
	...	...	140	165	115	...	...	98	...	...

III.

STATEMENT OF STORES IMPORTED BY THE SOUTH INDIAN RAILWAY COMPANY.

—	Packages.	1888-89	1889-90.	1890-91.	1891-92	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893	Totals for 1892-93
Stores	Packages	109,131	604,812	618,937	68,282	5,718	4,901	4,241	7,311	22,171
Fuel	Tons	856	...	...	...	...	...	...	...	...
Coke	,,	...	...	...	14	...	...	...	7	12
Coal	,,	5,276	6,582	5,980	...	...	...	...	...	...
Timber	,,	10	...	...	...	...	5	...	...	...
Boiler	No.	...	10	55	4	...	...	...	...	...

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IV. STATEMENT OF GOODS IMPORTED FROM COAST PORTS.

—	Packages.	1888-89.	1889-90.	1890-91.	1891-92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93.
Apparel and Effects	Packages	378	414	634	451	105	55	78	105	343
Alum	Barrels	51	56	...	10	5	76	106	...	187
Acids	Cases	149	11	99	89	11	5	17	92	125
Animals	No.	...	...	210	...	10	...	...	...	10
Arms and Guns	Cases	15	49	10	45	4	1	5	2	12
Boilers	No.	3	1	7	2	...	...	...	...	...
Bricks and Tiles	100	120	1,239	1,630	1,396	...	10	47	...	57
Coffee	Bags	715	461	349	379	366	95	14	120	595
Candles	Cases	1,871	682	...	...	...	...	...	...	...
Colours	,,	1,667	1,067	1,541	1,225	378	861	167	125	1,531
Crockery and Glassware	,,	782	413	305	322	96	87	108	175	466
Coal	Tons	2,351	186	14,884	13,249	600	3,692	1,985	7,515	13,792
Coke	,,	...	...	...	...	...	...	...	...	...
Carpets	Bales	112	178	187	77	20	25	22	27	94
Camphor and Benjamin	Tubs	1,483	1,585	4,640	682	248	419	433	206	1,306
Copra	Bags	191	124	...	32	...	...	...	...	...
Crackers	Cases	10	...	...	...	...	...	...	...	...
Copper	,,	1,350	1,061	...	1,667	356	384	168	28	936
Do.	Tiles & Ingots	...	11,053	1,071	96	...	...	421	...	421
Cutch & Lac	Packages	...	...	5,703	4,415	369	725	1,540	557	3,191
Cocoanuts	No.	900	600	...	3	...	...	...	415	415
Earthenware	Crates	169	30	23	392	1,424	...	1,496	21	2,941
Do.	Pipes	2,080	...	...	2,626	886	2,339	300	2,790	6,315
Firewood	Tons	1,212	892	...	...	...	...	...	...	...
Flour	Bags & Barrels.	2,819	4,352	4,177	7,248	2,334	2,889	3,501	2,958	11,682
Gunnies	Bales	7,993	11,863	10,786	7,930	381	1,024	2,097	6,159	9,661
Gram and Peas, &c.	Bags	125,942	191,357	225,739	271,682	73,695	1,09,441	112,513	84,496	3,80,145
Garlic	...	1,899	7,077	8,523	2,945	20	970	225	...	1,215
Hardware	...	...	...	...	...	...	...	...	...	...
Horns	Cases	542	469	605	641	120	88	315	674	1,197
Hides	Bundles	702	1,043	681	880	239	311	244	186	980
Iron	Bales	4,449	7,400	6,936	6,127	3,351	2,311	2,133	1,744	9,539
Iron Safes	Tons	277	457	400	231	48	49	96	00	293
Loaves	No.	65	47	19	31	10	11	2	115	38
Machinery	Bundles	5,116	5,796	5,574	6,508	773	1,522	1,030	417	3,742
Millinery and Haberdashery	Tons	171	109	251	158	15	6	37	21	79
Oil and Turpentine.	Cases	254	268	189	208	41	58	50	96	245
Paddy	Drums	2,794	2,540	2,846	8,340	1,686	1,357	1,197	2,129	6,369
Piece-goods	Bags	...	...	...	...	34,781	14,429	3,610	23,160	75,980
Paper	Cases and Bales	7,306	6,237	3,028	3,802	514	963	1,592	1,687	4,756
Paint	Bales	3,820	5,003	3,985	3,128	662	1,138	1,522	1,576	4,898
Piano	Kegs	212	1,098	99	224	14	210	155	304	683
Rice	No.	6	7	5	15	4	4	1	3	12
Rose Water	Bags	26,759	69,446	223,751	1,147,048	76,303	45,699	26,031	57,143	2,05,176
Seeds	Cases	1,409	1,867	715	1,484	762	557	231	265	1,815
Skins	Bags	13,066	13,212	12,044	30,406	7,998	6,745	4,798	6,206	25,747
Silk	Bales	5,729	5,727	5,887	6,199	1,130	948	1,006	1,968	5,052
Sandalwood	,,	837	883	825	1,051	170	280	177	72	699
Sugar	Bundles	145	297	63	143	83	25	9	83	121
Specie	Bags	6,900	2,816	2,134	1,381	158	190	227	291	866
Sundries	No.	201	184	37	202	14	40	27	109	190
Soap	Packages	43,462	38,472	40,653	47,533	13,376	10,059	12,379	11,323	47,137
Sulphur	Cases	105	179	363	445	6	...	17	17	40
Spice	Casks	48	173	...	471	334	...	137	73	544
Twine and Rope	Packages	...	...	3,674	359	182	68	313	177	740
Tin Plates	Bales and Coils	1,164	541	942	839	101	240	202	232	775
Twist	Boxes	1,118	1,322	708	1,807	93	289	303	227	912
Turmeric	Bales	4,064	3,434	1,338	1,126	209	600	168	170	1,147
Timber	Bags	5,790	8,421	10,751	7,224	1,086	1,515	1,107	1,269	4,977
Tea	Tons	17,277	17,889	16,850	15,137	2,590	2,586	2,044	3,375	10,595
Yellow Metal	Cases	1,421	3,813	4,785	1,821	2,272	864	261	14	3,411
Horses	,,	155	342	809	6	193	107	197	45	542
Two-wheeled Carriage	No.	...	...	...	1	8	...	...	7	15
Four-wheeled Carriage	No.	...	...	...	...	...	...	...	2	4
									3	3

V. STATEMENT OF GOODS EXPORTED TO FOREIGN PORTS.

—	Packages.	1888-89.	1889-90.	1890-91.	1891-92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93
Beer and Ale ...	Cases	13	30	...	18	2	...	...	...	2
	Casks	...	2	...	60	...	7	...	...	7
	Hogsheads ...	1	1	...	3	...	...	...	...	...
Cinchona Bark ...	Bales	2,185	1,299	1,346	471	110	327	32	60	529
Chillies	Bags & Bundles.	2,225	3,262	1,362	2,760	...	...	9	...	9
Cigars	Cases	1,239	1,423	942	1249	146	139	92	179	556
Coffee	Bags	23,456	15,515	22,708	23,764	12,152	3,406	41	19,014	34,613
Cotton	Bales	55,173	101,837	77,022	48,202	8,512	8,387	6,422	2,819	26,140
Cotton Twist ...	,, ...	3,960	5,956	8,271	4,229	2,294	2,907	5	60	5,266
Coriander and Omum Seeds ...	Bags ...	9,281	11,610	1,385	8,218	361	260	899	294	1,814
Carpets	Bales	645	725	524	418	50	90	56	92	288
Coal	Tons	182	115	...	905	213	...	100	...	313
Deer Horns ...	Packages ...	874	1,366	1,311	1,574	364	743	263	179	1,549
Explosive ...	Cases	14	25	...	21	...	1	...	...	...
Firewood ...	Tons	23	...	...	...	...	...	...	...	...
Four-wheeled Carriage ...	No. ...	30	3	2	8	1	1	...	...	2
Ground Nuts ...	Bags	95,642	206,096	190,320	93,132	11,610	11,110	82	3,407	26,209
Gram, Peas, &c. ...	,, ...	937	1,454	...	519	...	...	136	25	161
Horns, Cow and Buffalo ...	Tons	199	66	84	62	15	4	3	7	29
Hides, Tanned ...	Bales & Bundles.	17,858	17,532	16,460	21,848	5,444	7,352	3,898	5,118	21,812
Indigo	Cases & Chests.	22,762	27,618	24,453	14,622	2,762	2,781	10,802	9,588	25,933
Iron	Tons	29	23	...	2	...	...	11	...	11
Jaggery	Bags	23,520	111,032	34,135	28,985	13,736	...	6,443	36,493	56,672
Myrabolams ...	Bags ...	195	452	2,576	235	60	...	31	...	91
Miscellaneous ...	Packages ...	23,607	17,990	16,335	37,808	8,290	8,889	4,641	6,727	28,547
Onions	Bags & Baskets	7,979	9,078	12,022	21,964	4,458	935	24	200	5,617
Oil	Casks	331	587	50	434	18	4	25	9	56
Piece-goods ...	Bales and Cases.	3,372	3,419	5,843	6,205	1,075	1,281	1,540	961	4,857
Potatoes	Bags & Baskets.	3,837	2,703	2,284	2,437	157	...	115	10	282
Poonac	Bags	13,116	15,187	26,134	33,880	5,962	4,165	3,764	2,236	16,127
Piano	No.	10	8	3	41	5	2	3	...	10
Paddy	Bags	...	...	...	...	...	...	5	...	5
Rice	,, ...	17,589	65,475	2,059	1,138	1	...	2,639	589	3,229
Redwood	Tons	1,382	2,052	1,809	699	342	384	273	655	1,654
Seeds, Gingelly and Castor ...	Bags ...	20,137	80,411	19,021	1,313	652	65	7,633	4,304	12,654
Skins, Sheep and Goat, Tanned ...	Bales ...	32,498	30,399	31,209	32,194	7,435	10,035	7,207	9,386	34,063
Sandalwood ...	Bundles ...	672	637	1,728	1,534	43	...	1	286	330
Spirits and Wine	Cases ...	135	331	...	332	...	18	1	22	41
	Casks ...	5	87	...	977	1	39	25	...	65
	Puncheons ...	1,112	18	...	...	...	...	...	...	...
Sugar	Bags	153	7,296	...	599	21	1	62	77	161
Specie	Boxes	...	33	55	94	21	...	9	18	48
Tamarind ...	Bundles ...	8,277	2,549	1,156	6,445	1,969	1,467	61	1,834	5,331
Turmeric	Bags	1,898	1,526	...	2,159	217	20	374	330	941
Tea	Cases	4,275	3,822	2,384	2,265	424	785	370	190	1,769
Two-wheeled Carriage ...	No.	...	...	3	1	...	...	...	...	...
Wool	Bales	970	1,043	1,196	1,021	436	448	207	384	1,470
Yellow Metal ...	Tons	3	5	...	107	...	...	100	...	100

VI. STATEMENT OF GOODS EXPORTED TO COAST PORTS.

—	Packages.	1888-89.	1889-90.	1890-91.	1891-92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892	Quarter ending 31st March 1893.	Totals for 1892-93.
Beer and Ale ...	Cases ...	249	456	289	352	81	86	58	69	294
	Casks ...	16	110	159	159	15	10	45	24	94
	Hogsheads ...	161	10	47	7	1	5	9	26	41
Cinchona Bark ...	Bales ...	178	186	...	395	...	84	...	...	84
Chillies ...	Bags & Bundles	2,908	5,535	4,592	2,064	1,264	1,126	280	237	2,907
Cigars	Cases ...	1,488	1,298	1,345	1,418	311	277	288	260	1,136
Coffee	Bags ...	506	574	605	507	806	334	198	111	1,449
Cotton	Bales ...	1,972	4,761	8,521	5,721	832	1,312	573	1,528	4,245
Cotton Twist ...	,, ...	3,816	3,075	5,103	4,698	784	950	3,123	1,281	6,138
Coriander and Omum Seeds ...	Bags ...	2,728	7,071	4,783	2,970	1,531	1,012	582	3,877	7,002
Cement ...	Casks ...	...	...	...	...	...	...	8,611	297	8,908
Carpets	Bales ...	34	26	45	68	14	11	14	12	51
Coal	Tons ...	...	94	976	275	25	...	75	350	450
Deer Horns ...	Packages ...	85	7	84	108	1	...	100	50	151
Explosive ...	Cases ...	201	303	55	2,668	315	32	26	958	1,331
Eggs	Pots ...	2,717	3,882	2,801	1,165	157	193	379	396	1,125
Firewood ...	Tons ...	28	8	...	2	...	...	...	...	...
Four-wheeled Carriage	No. ...	26	9	34	21	9	5	5	12	31
Groundnuts ...	Bags ...	30,757	20,996	61,463	27,790	7,797	731	2,852	6,959	17,839
Gram, Peas, &c. ...	,, ...	15,204	8,987	3,568	521	66	587	33	540	1,226
Horns, Cow and Buffalo ...	Tons ...	198	336	30	310	28	68	112	99	307
Hides	Bales & Bundles	407	495	506	379	111	109	142	164	526
Indigo	Cases & Chests.	405	829	412	165	...	16	600	200	816
Iron	Tons ...	989	743	850	2,244	885	1,517	26	183	2,611
Jaggery	Bags ...	376	296	...	258	86	4	35	1,323	1,448
Kerosine Oil ...	Cases ...	1,516	4,680	3,463	10,327	212	216	11	220	659
Myrabolams ...	Bags ...	322	139	535	1,054	1	6	12	272	291
Miscellaneous ...	Packages ...	12,419	20,868	36,308	50,510	12,262	11,366	12,071	33,885	69,584
Onions	Bags & Baskets	9,705	11,516	21,141	22,442	2,036	4,512	26,480	20,378	53,406
Oil	Casks ...	790	1,844	1,281	807	285	43	238	71	637
Piece-goods ...	Bales & Cases	3,429	3,613	6,259	5,615	1,566	2,336	1,779	2,970	8,651
Potatoes	Bags & Baskets	24,229	21,992	26,470	23,637	918	7,881	14,823	766	24,388
Poonac	Bags ...	2,210	1,469	4,752	4,770	6,023	3,355	3,951	8,852	22,181
Piano	No. ...	5	42	24	23	2	4	8	2	16
Paddy	Bags ...	27,149	4,019	11,426	...	...	250	1,300	7,256	8,806
Rice	,, ...	...	...	...	...	...	...	...	...	...
Redwood	Tons ...	6,790	8,198	8,098	5,448	3,076	1,924	12,678	14,215	31,893
Seeds, Gingelly and Castor ...	Bags ...	62	194	...	119	48	639	6	...	693
Skins, Sheep & Goat, Tanned ...	Bales ...	19,374	28,756	57,157	16,803	401	252	633	4,501	2,787
Sandalwood ...	Bundles ...	510	758	1,271	721	90	166	253	587	1,046
Spirits	Cases ...	224	342	1,856	153	54	9	162	31	256
	Casks ...	2,148	2,098	3,049	2,982	1,255	772	1,023	733	3,783
	Puncheons ...	150	162	250	727	86	210	196	224	716
Sugar	Bags ...	2	16	54	13	1	2	95	91	189
Specie	Boxes ...	460	2,307	2,093	773	564	338	268	249	1,419
Tamarind ...	Bundles ...	278	164	154	236	169	132	169	40	510
Turmeric	Bags	2,010	3,598	17,197	3,624	4,340	1,254	725	1,934	8,253
Tea	Cases	8,972	463	4,719	19,258	5,218	2,762	3,751	6,152	17,883
Two-wheeled Carriage	No.	55	544	298	341	17	15	15	15	62
Wool	Bales	14	8	27	15	4	2	4	6	16
Yellow Metal ...	Tons	37	567	475	769	147	190	118	148	603
		88	25	47	53	12	4	51	...	67

STATEMENT OF STORES, &c., IMPORTED BY GOVERNMENT.

Department.	Description.	Class.	1888-89.	1889-90.	1890-91.	1891-92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	
Accountant-General.	Specie Silver.	Boxes	1,789	1,109	1,176	403	100	...	370	112	
	„ Copper.	„	335	1,320	3,475	5,100	...	...	...	710	
	Silver&Copper Notes ...	„	174	...	...	...	...	...	...	...	
	Packages ...	No.	19	21	8	32	...	...	17	2	
State Railway ...	Packages&Pieces		...	1	...	27	...	1	...	...	
	Rails ...	„	593	...	3	...	...	...	...	...	
	Sleepers ...	„	...	...	...	...	...	...	...	...	
	Bridge Works	Tons	...	...	...	...	...	...	...	...	
Public Works Department	Boilers ...	No.	2	...	...	...	...	...	...	...	
	Coal ...	Tons	106	44	60	2	...	...	...	...	
	Iron ...	„	220	442	250	50	...	20	...	...	
	Stores ...	Pkgs.	1,691	1,127	2,049	271	...	...	9	...	
Ordnance	Coal ...	Tons	86	1,968	939	15,148	2,023	1,130	2,096	1,248	6,4
	Ammunition..	Boxes	1,303	51	...	...	...	...	...	...	
	Stores ...	Pkgs.	15,838	22,268	22,898	2,148	...	...	...	...	
Madras Harbour Works	Cement ...	Casks	35,764	40,241	30,375	13,017	4,067	1,152	10,296	6,812	28,5
	Stores ...	Pkgs.	321	1,009	895	1,869	...	...	...	...	
	Coal ...	Tons.	...	496	586	3,869	...	...	...	...	
Clothing ...	Packages ...	No.	1,773	2,831	1,527	...	...	...	...	...	
Police ...	„ ...	„	248	135	335	1,983	589	635	709	391	2,3
Salt Revenue ...	„ ...	„	75	115	190	122	98	51	13	5	1
Post Office ...	„ ...	„	980	1,858	1,739	272	220	56	3	11	2
Medical ...	„ ...	„	1,384	1,616	1,250	1,119	198	249	129	282	8
Telegraphs ...	„ ...	„	6,899	16,414	19,211	1,779	415	50	32	510	1,0
Stationery ...	„ ...	„	1,088	743	611	34,768	1,752	1,949	6,769	13,656	24,1
Stamps ...	„ ...	„	1,435	1,499	1,647	732	19	107	783	288	1,1
Commissariat ...	„ ...	„	1,811	1,779	4,384	1,961	186	656	179	101	1,1
Gazette Press ...	„ ...	„	52	32	2,414	8,588	2,013	1,204	3,038	1,165	7,4
Marine ...	„ ...	„	32	182	511	161	7	126	11	5	1
Supt., Railway Mail Service ...	„ ...	„	52	31	...	729	117	107	509	147	8
Revenue Survey...	„ ...	„	252	52	32	...	...	...	...	...	
Agriculture ...	„ ...	„	1	6	292	297	73	133	1	1	2
Government Central Museum ...	„ ...	„		4	10	380	209	101	6	4	3
Under-Secy. to Government ...	„ ...	„	6			15	3	2	3	2	1
Supt. of Prisons ...	„ ...	„	87	84	94	235	439	28	20	17	5
Revenue Board ...	„ ...	„	3	9	...	1	2	3	8	4	
Forests ...	„ ...	„	65	36	139	424	...	15	12	6	3
Bank of Madras	Specie Silver.	Boxes	31,811	175	1,318	1,196	...	2	1	6	1
	„ Copper	„	...	3	...	...	...	...	...	...	
Presidency College	Packages ...	No.	...	56	...	...	...	...	...	...	
School of Arts ...	„ ...	„	...	13	40	28	...	...	2	6	1
Sanitary Commissioner ...	„ ...	„	2	2	...	3	...	...	...	1	
Inspector of Cattle Diseases ...	„ ...	„	1	...	...	...	...	...	...	...	
Chemical Examiner	„ ...	„	...	...	...	...	...	...	...	...	
Medical College...	„ ...	„	116	10	...	9	...	...	100	...	1
Dy. Collectors ...	„ ...	„	25	15	32	31	...	...	...	7	
Camp Equipage ...	„ ...	„	50	2	64	73	2	6	16	16	1
Astronomer ...	„ ...	„	...	...	14	9	...	2	13	2	2
Presidency Pay Master ...	„ ...	„	11	1	...	...	1	10	2	...	
Registration ...	„ ...	„	8	6	6	28	2	7	4	...	
Director of Public Instruction ...	„ ...	„	24	6	13	2	5	3	...	...	
Superintendent, Remount Depôt, Hussur.	„ ...	„	...	2	3	7	1	3	...	...	
Resident, Mysore, in Bangalore.	„ ...	„	...	9	5	9	...	137	2	...	13
Secretary for Berar Hyderabad.	„ ...	„	...	...	...	...	...	...	300	300	6
H.E. Lord Wenlock Government House, Madras.	„	„	...	...	...	...	...	...	1	1	
Judge, Civil City Court, Madras.	„	„	...	...	...	...	...	...	6	1	
Quarter Master General.	„	„	...	...	...	...	...	...	...	2	
Registrar of High Court.	„	„	...	...	...	...	...	...	...	1	
			...	...	...	...	...	...	3	...	
			...	...	...	...	...	...	1	...	

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STATEMENT OF STORES, &c., EXPORTED BY GOVERNMENT.

partment.	Description.	Class.	1888-89.	1889-90.	1890-91.	1891-92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Total for 1892-93.
ccountant General	Specie Silver.	Boxes.	118	174	20	411	27	9	3	6	45
	„ Copper,	„	136	216	330	965	173	25	2	...	200
	„ Notes,..	„	5	4	10	6	4	3	3	3	13
	„ Packages	No.	1	1	6	4	...	1	...	...	1
ank of Madras...	„ Silver...	Boxes.	...	10	...	34	...	...	...	...	
„ „ ...	„ Copper.	„	...	37	...	...	33	29	...	...	62
rdnance ...	Packages & Pieces.	No.	5,765	25,038	6,564	8,595	1,083	1,123	2,085	1,540	5,831
ublic Works Department ...	„ ...	„	4,420	18,358	429	1,784	141	23	107	217	488
lothing ...	„ ...	„	916	1,018	1,254	1,327	225	483	183	195	1,086
Police ...	„ ...	„	749	849	727	889	95	495	272	112	974
Salt Revenue ...	„ ...	„	330	493	306	591	84	293	149	199	725
Medical ...	„ ...	„	1,049	1,868	1,552	1,367	518	273	123	696	1,610
Telegraph ...	„ ...	„	355	1,125	9,462	8,845	35	120	3,735	440	4,330
Stationery ...	„ ...	„	777	398	799	693	153	132	121	374	780
Stamps ...	„ ...	„	165	171	195	220	53	45	134	66	298
Commissariat ...	„ ...	„	5,128	5,179	7,761	7,971	740	788	2,672	2,005	6,205
Gazette Press ...	„ ...	„	445	567	476	526	114	128	156	105	503
Marine ...	„ ...	„	419	307	268	390	92	122	78	74	366
Revenue Board ...	„ ...	„	26	52	79	77	18	5	4	10	37
Revenue Settlement	„ ...	„	157	55	87	51	29	33	17	5	84
Revenue Survey...	„ ..	„	31	77	74	75	56	233	92	71	452
Superintendent of Prisons ...	„ ...	„	151	91	71	69	35	90	19	52	196
Registration ...	„ ...	„	80	61	61	66	...	...	...	43	43
Conservator of Forests ...	„ ...	„	28	49	31	34	3	4	11	15	33
Quarter-Master General ...	„ ...	„	...	...	...	...	...	4	..	...	4
Government Central Museum ...	„ ...	„	7	6	9	10	4	15	2	1	22
Deputy Collectors.	„ ...	„	20	...	...	2	9	...	...	..	9
Camp Equipage ...	„ ...	„	...	...	...	...	...	...	...	...	...
Government Astronomer ...	„ ...	„	5	2	...	...	11	2	...	5	18
Agriculture ...	„ ...	„	...	...	...	5	15	2	1	...	5	8
General Hospital..	„ ...	„	...	...	...	...	...	...	...	...	...	...
State Railways ...	„ ...	„	293	...	...	100	...	...	...	...	...	...
Inspector of Cattle Diseases ...	„ ...	„	11	11	3	3	1	...	...	...	1
Chemical Examiner.	„ ...	„	...	1	3	...	...	1	...	...	1
Director of Public Instruction ...	„ ...	„	9	2	16	10	3	1	...	...	6
Registrar of University ...	„ ...	„	14	16	16	13	...	...	10	...	10
Collectors ...	„ ...	„	...	...	...	10	...	...	...	...	...
Curator of Government Garden, Ooty	„ ...	„	...	2	12	11	...	...	...	...	...
Engineer, H. T. Board ...	„ ...	„	..	1	...	...	...	...	...	...	...
Crown Officer, High Court ..	„ ...	„	1	8	13	14	6	3	1	8	18
School of Arts ...	„ ...	„	1	...	...	...	...	...	...	...	...
Secretary to Government, Public Department ...	„ ...	„	4	1	...	2	...	...	...	...	...
Registrar-General of Births, Deaths and Marriages ...	„ ...	„	...	...	...	...	...	...	...	...	...
Inam Commissioner	„ ...	„	...	1	...	1	...	...	...	...	...
Consulting Engineer to Government Railways.	„ ...	„	...	4	36	20	1	...	...	...	...
Civil Engineering College ...	„ ...	„	...	...	...	...	...	...	...	1	1
Superintendent, Censuss Operations.	„ ...	„	...	...	...	...	...	...	...	4	4
Post Office ...	„ ...	„	..	...	...	...	...	...	1	...	1
Sanitary Commissioner ...	„ ...	„	...	...	...	...	...	...	...	...	1

2412/26

ADMINISTRATION REPORT

OF THE

DEPUTY CONSERVATOR OF THE PORT OF MADRAS, FOR THE YEAR 1892-93.

The number of vessels entering the Port of Madras during the year is shown in the following statement and compared with the preceding year, shows a decrease both in number and tonnage.

	1891-92.		1892-93.	
	No.	Tonnage.	No.	Tonnage.
Steam ships, Mercantile	697	1,195,738	629	1,110,987
Sailing do. do.	14	19,736	*8	9,570
Do. Native Craft	125	16,213	74	6,724
Men-of-War, Government Ships, Transports, &c.	16	16,637	20	28,952
Total..	852	1,248,324	†731	1,156,233

The decrease being due, I presume, to stagnation in the shipping trade.

2. The number of vessels which left the Port during the year was—

	No.	Tonnage.
Steam ships	647	1,135,056
Sailing do.	8	9,570
do. Native Craft	84	8,203
Total...	739	1,152,829

3. The Revenue amounted to Rs. 1,29,172 against Rs. 1,54,078 for 1891-92, and was made up from the following sources :—

Port Funds	...	Rs. 1,02,363
Salvage	...	,, 547
Diver Services	...	,, 277
Hire of Port Raft	...	,, 845
Boat Licenses	...	,, 513
Shipping Office Fees and Fines ...	...	,, 808
Office Fees for Overtime ...	...	,, 1,248
Sale of old Masulah boat ...	...	,, 89
Sundries	...	,, 71
		1,06,761
Pilotage and Boats' charges connected	...	22,411
	Total...	1,29,172

* Note.—3 Sailing vessels of 4,301 tons called for orders only.

† (including 28 German, 19 French, 23 Austro-Hungarian, 3 Norwegian.)

Total Foreign 72

4. *Artificial Harbour.*—Shipping work has gone on throughout the whole year without a single day's interruption within the Harbour. Two large sailing vessels were berthed within the Harbour. The Native Craft have also availed themselves of the use of the Harbour to a great extent. Accretion of sand to the south of the Harbour still continues, and unless something is done soon in the way of dredging, No. 1 mooring will be closed to vessels of deep draft.

The Harbour was six times full during the year, but no serious detention of vessels outside has occurred; when practical an extra steamer has been moored in the Harbour fair way.

The S.S. "Caxo" was ordered out of the Harbour on the 7th May 1892 to make room for other vessels. Barque "Bernica" (Native vessel) dismasted at sea, was brought inside the Harbour to re-fit.

Weather.—The warning signals have only been hoisted once for a few hours during the year on (20th October).

Accidents and Casualties.—No accidents or casualties occurred during the year, nor were any boats damaged. No loss of life has been reported.

Moorings.—All the moorings of the inner buoys were examined and found in condition to bear the strains brought on them. Nos. 1 and 2 will require new chain at the next overhaul in August. A new mooring chain with a two-ton anchor has been placed at the Northern Cassimode mooring. Oil moorings were put down for Messrs. Best & Co. in No. 5 berth, the buoys and chain for which were obtained from the Harbour Works and the anchors locally. The buoys have been cleaned and painted red. A new buoy has been placed on the northern side of the entrance and painted black.

Boats.—The same difficulty as in former years has been experienced by the Harbour Masters in boarding vessels during the N. E. monsoon: the Board have, however, sanctioned a 37 foot Steam Cutter, which will be built in the R. I. M. Dockyard, Calcutta. The Establishment has worked fairly well during the year and the boats, gear, &c., are in good condition. The Port Masulah boat not being required, was sold.

Port Raft.—The services of the Port Raft have continually been required; 47 trips were made.

Cargo Boat.—There are 78 lighters registered against 73 for last year, giving an increase of five; while the Masulah boats have fallen to 109 against 129, a decrease of 20.

Time Signal.—The Time signal has been altered and now drops at 1 P.M. (Madras Mean Time); there were 19 failures or irregularities during the year.

Life-Saving Apparatus.—Quarterly practice has taken place, and both men and gear are efficient.

Leave.—Commander H. B. Simpson, R.I.M., Deputy Conservator of the Port, availed himself of one year's furlough, granted by the Government of India on May 28th, 1892, and was relieved by Mr. J. P. James, of the Madras Port Service, as a temporary measure pending the arrival of Commander C. W. Hewett, R.I.M., from Bombay, the latter officer took over charge from Mr. James on June 30th.

Mr. H. C. Taylor, Harbour Master, availed himself of 3 months' privilege leave granted him by the Harbour Trust Board on July 18th, 1892.

Commander Hewett, R.I.M., was on 30 days' privilege leave, from 3rd September, granted him by the Madras Government; during his absence the duties of the Office were carried on by Mr. C. S. Johnson, Reserve Port Officer, in addition to his own.

Sunday Work.—The Deputy Conservator opened his Office for work on 23 Sundays during the year.

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Harbour Master.—1,466 vessels have passed through the hands of the Harbour Masters, without accidents, a condition of things which I consider highly creditable to those Officers. The duties of Mr. Corfield, Senior Harbour Master, have become too heavy for one man, a boatswain has been sanctioned by the Board to assist him. The new Office for the Harbour Masters has been finished and connected with the Telephone Exchange, which is of great convenience to them and the shipping community generally.

Port Diver.—The Port Diver when unoccupied with the moorings is as busy as in former years salving cargo; his department and gear is efficient.

Shipping Office.—The business of the Shipping Office shows a decrease on last year as the figures given below will show: better office accommodation and probably an increase of establishment for this department is required.

	No.	
European Seamen engaged	13	42
,, ,, discharged	29	
,, ,, sent to Hospital	12	
,, ,, ,, Jail	7	
Native Seamen engaged	52	818
,, ,, discharged	766	
Native Seamen sent to Hospital	2	
,, ,, ,, Jail	1	
Distressed Seamen sent Home	10	

The fees and fines collected amounted to Rupees 808.

The usual periodical returns and statements have been sent to the Board of Trade, London, and the Government of Madras as they fell due.

CHARLES W. HEWETT,
Commander, R. I. M.,
Ag. Dy. Conservator of the Port.

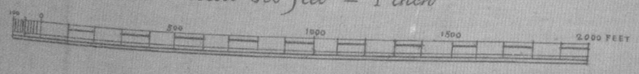
PORT OFFICE,
MADRAS, *8th May* 1893.

PLAN OF MADRAS HARBOUR

1893

Soundings reduced to Low Water Ordinary Spring Tides

Scale 500 feet = 1 inch



2412/28

Lithographed at the Lawrence Asylum Press, Madras 1893.

BLACK TOWN

A. Lee Pozin
M.I.M.E. & A.M.I.C.E. &c
ENGINEER
HARBOUR TRUST BOARD.


Hutchences
Howse
LATRINES

2412/30

2412/31

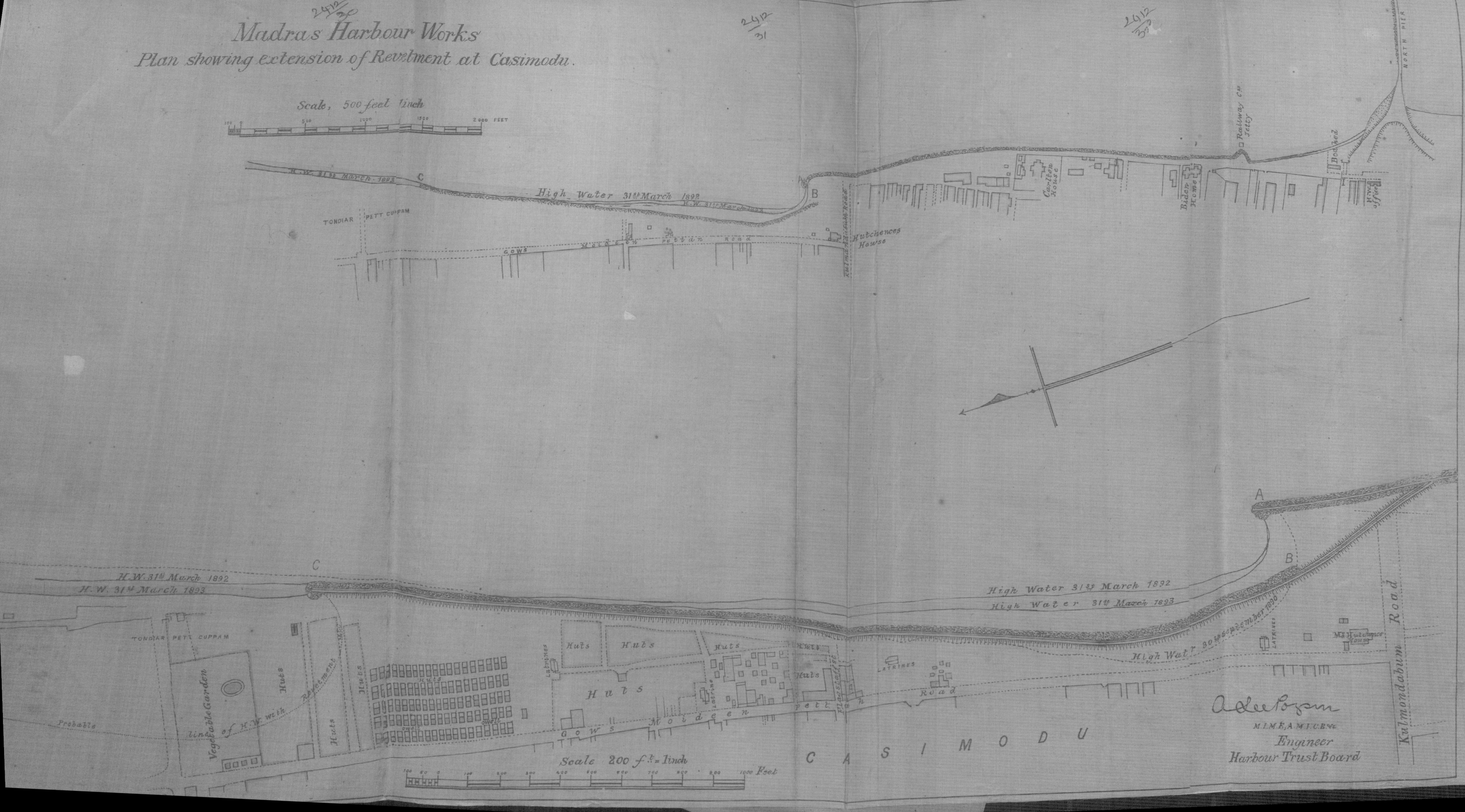
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Madras Harbour Works

Plan showing extension of Revetment at Casimodu.

Scale, 500 feet 1 inch

100 0 500 1000 1500 2000 FEET



A Lee Pogson
M.I.M.E., A.M.I.C.E., etc.
Engineer
Harbour Trust Board

2412/35

25TH AUGUST 1893, Nos. 310, 311, MARINE.

GOVERNMENT OF MADRAS.

MARINE DEPARTMENT.

READ—the following paper :—

From the Chairman, Harbour Trust Board, Madras, dated 21st July 1893, No. 1346.

ORDER—dated 25th August 1893, No. 310, Marine.

The Chairman, Harbour Trust Board, submits the administration report of the Trust for 1892–93.

2. As in the three preceding years the Board consisted of ten trustees, and the minimum number of meetings prescribed by section 17 (2) (a) of Act II of 1886, viz., one a fortnight, was held. There was one special meeting in February. The average attendance of trustees was 7·7 against 8·7 in 1891–92, the decrease being consequent on the absence on duty of two of the official trustees.

3. The receipts of the year aggregated Rs. 5,16,631 as against Rs. 5,74,014 in 1891–92. Omitting the contributions of Rs. 50,000 and Rs. 65,000 made from Port funds in 1891–92 and 1892–93 respectively, the receipts of the Board showed a decrease of Rs. 72,383. The opening balance of the year was Rupees 11,45,648, which, added to the receipts, gave a total of Rs. 16,62,279. The expenditure, including Rs. 2,87,039 paid to Government, was Rs. 4,96,428, and the closing balance was therefore Rs. 11,65,851 or Rs. 20,203 more than the opening balance. Of this sum, however, Rs. 15,000 represents the increase in the contribution made from Port funds The figures given above do not include a sum of Rs. 1,31,000 which appears on both sides of the account as "advances to construction account" and the corresponding refunds.

Rs. 5,74,014 — 50,000 =	5,24,014	
Rs. 5,16,631 — 65,000 =	4,51,631	
Rs.	72,383	

4. The reason assigned by the Board for the serious falling off in its revenue is the general dullness of trade. The results would have been still more marked had not the imports of food-grains from coast ports continued to be much in excess of those of normal years. An examination of the statement at page 5 of the report shows that the largest decreases occurred under the items noted in the margin. To the amount of the dues should be added a sum of Rs. 32,175, shown separately in the accounts as "cranage," to enable a correct comparison to be made, for the figures for 1891–92 include also the receipts under that head. A serious decline is, however, still apparent.

	1891–92. Rs.	1892–93. Rs.
Harbour dues—Imports ..	2,85,071	2,08,382
Harbour dues—Exports ..	80,716	64,453
Porterage	1,08,323	1,02,151

I. STATEMENT OF GOODS IMPORTED FROM FOREIGN PORTS.

—	Packages.	1888-89.	1889-90.	1890-91.	1891-92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93.
Apparel and Effects ...	Packages...	1,368	1,217	851	1,347	212	154	429	273	1,068
Alum	Barrels ...	496	504	1,233	326	156	50	378	102	686
Asphalte, Tar, & Pitch.	Casks ...	2,797	3,133	3,623	4,439	913	392	596	428	2,329
Acids	Cases ...	1,484	775	1,362	1,854	799	304	129	176	1,408
Arms and Guns ...	,, ...	516	235	126	442	122	28	49	12	221
Arrack ...	Casks ..	832	773	346	884	146	312	247	128	833
Blankets... ...	Bales ...	25	36	58	119	4	16	143	5	168
Beef and Pork ...	Cases ...	2	...	...	36	...	...	...	...	...
Bricks ...	100 ...	420	1,497	222	1,021	170	...	231	150	551
Beer	Cases ...	6,697	5,664	6,606	6,123	2,242	2,312	1,841	2,315	8,710
	Barrels ...	2,160	935	110	1,140	639	138	433	497	1,707
	Hogsheads	4,424	3,649	8,217	6,808	2,517	1,579	2,159	1,985	8,210
Boiler	No. ...	33	19	32	51	7	6	10	9	32
Corks ...	Bundles ...	191	133	88	88	14	13	18	27	72
Canvas	Bales ...	140	77	244	121	59	38	34	62	193
Candles	Cases ...	14,278	20,539	18,515	16,637	8,329	9,047	7,366	6,275	31,017
Colours	,, ...	1,980	1,056	2,698	3,838	465	1,147	1,177	497	3,286
Confectionery Provisions and Oilmanstores	,, ...	17,042	14,214	17,896	23,395	5,047	4,253	8,321	4,468	22,129
Crockery & Glassware.	Crates & Casks.	2,942	3,018	4,099	4,538	1,104	739	802	1,172	3,817
Chalk ...	Barrels ...	377	95	178	370	15	50	25	50	140
Cement ...	Casks ...	17,203	8,868	7,049	14,522	4,815	1,430	968	656	7,369
Cast Iron Pipes and Tubes	Tons ...	683	1,009	950	335	435	370	376	255	1,436
Camphor ...	Tubs ...	2,675	1,560	1,556	4,739	1,091	1,132	1,067	1,559	4,349
Coal, Coke and Fuel ...	Tons ...	13,773	11,992	16,688	...	...	...	...	...	...
Coal	,, ...	...	...	...	33,686	17,283	10,494	11,265	10,466	49,508
Coke	,, ...	...	...	...	578	101	510	139	637	778
Fuel	,, ...	...	...	...	...	...	...	...	2,953	2,953
Crackers... ...	,, ...	...	...	...	...	...	...	...	...	...
Copper Plates and Tiles	Cases ..	879	975	1,134	470	...	724	115	1	840
Corrugated Iron ...	No. ...	498	5,012	1,594	4,802	90	109	145	177	521
	Packages...	51	449	2,913	805	506	486	845	676	2,512
Dynamite ...	Cases ...	4,998	6,450	9,230	13,040	3,220	310	405	4,100	8,035
Earthenware ...	Crates ...	2,104	794	1,913	2,318	220	376	920	370	1,886
Fire Clay ...	Casks ..	234	147	23	2,768	56	...	148	68	272
Flour	Bags and Barrels.	483	675	367	1,317	296	275	171	79	821
Flannel ...	Bales ...	74	23	58	54	3	9	9	9	30
Gunpowder ...	Packages...	476	962	1,746	6,667	1,100	2,608	387	1,892	5,987
Harmonium ...	Cases ...	4	11	9	30	...	3	14	10	27
Hardware ...	Cases									
	& Casks.	4,247	2,924	3,954	8,234	1,906	1,331	1,068	2,478	6,783
Hops ...	Packages	269	115	129	129	19	17	8	20	64
Iron	Tons ...	17,771	12,762	18,138	13,737	6,946	4,923	1,861	4,199	17,929
Iron Safes ...	No. ...	577	348	241	296	90	36	10	14	150
Kerosine Oil	Cases ...	248,024	248,505	345,000	397,862	28,400	25,835	82,664	1,14,421	2,51,320
Lime Water	Tons ...	...	...	...	...	...	...	...	3,361	3,361
... ...	,, ...	108	31	45		...			...	...
Malt ...	Bags ...	565	609	354	445	88	300	7	12	407
Millinery and Haberdashery ...	Cases ...	1,640	1,393	1,356	1,609	233	551	452	330	1,566
Matches	,, ...	11,739	4,928	7,916	10,665	2,639	2,277	1,579	2,630	9,125
Machinery	Tons ...	1,752	1,799	1,600	3,099	886	707	678	970	3,241
Nails	Kegs ...	19,256	4,409	13,287	13,744	4,471	664	2,237	3,175	10,547
Oil and Turpentine ...	Drums ...	6,984	8,863	6,942	7,225	2,365	1,903	1,680	952	15,500
Piece Goods ...	Piece Goods Twist.	105,495	97,383	82,649	85,079	12,281 5,009	11,045 4,282	13,477 5,706	14,748 3,676	51,551 18,664
Paper	Bales ...	3,236	3,988	4,646	6,546	1,857	1,021	1,128	1,512	5,518
									9	

V. STATEMENT OF GOODS EXPORTED TO FOREIGN PORTS.

—	Packages.	1888-89.	1889-90.	1890-91.	1891-92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93
Beer and Ale ...	Cases	13	30	...	18	2	...	...	...	2
	Casks	...	2	...	60	...	7	...	...	7
	Hogsheads ...	1	1	...	3	...	...	...	...	...
Cinchona Bark ...	Bales	2,185	1,299	1,346	471	110	327	32	60	529
Chillies	Bags & Bundles.	2,225	3,262	1,362	2,760	...	...	9	...	9
Cigars	Cases	1,239	1,423	942	1249	146	139	92	179	556
Coffee	Bags	23,456	15,515	22,708	23,764	12,152	3,406	41	19,014	34,613
Cotton	Bales	55,173	101,837	77,922	48,202	8,512	8,387	6,422	2,819	26,140
Cotton Twist ...	,, ...	3,960	5,956	8,271	4,229	2,294	2,907	5	60	5,266
Coriander and Omum Seeds	Bags	9,281	11,610	1,385	8,218	361	260	899	294	1,814
Carpets	Bales	645	725	524	418	50	90	56	92	288
Coal	Tons	182	115	...	905	213	...	100	...	313
Deer Horns ...	Packages ...	874	1,366	1,311	1,574	364	743	263	179	1,549
Explosive ...	Cases	14	25	...	21	...	1	...	...	...
Firewood ...	Tons	23	...	...	...	...	...	...	...	...
Four-wheeled Carriage	No.	30	3	2	8	1	1	...	...	2
Ground Nuts ...	Bags	95,642	206,096	190,320	93,132	11,610	11,110	82	3,407	26,209
Gram, Peas, &c. ...	,, ...	937	1,454	...	519	...	...	136	25	161
Horns, Cow and Buffalo ...	Tons	199	66	84	62	15	4	3	7	29
Hides, Tanned ...	Bales & Bundles.	17,858	17,532	16,460	21,848	5,444	7,352	3,898	5,118	21,812
Indigo	Cases & Chests.	22,762	27,618	24,453	14,622	2,762	2,781	10,802	9,588	25,933
Iron	Tons	29	23	...	2	...	...	11	...	11
Jaggery	Bags	23,520	111,032	34,135	28,985	13,736	...	6,443	36,493	56,672
Myrabolams ...	Bags	195	452	2,576	235	60	...	31	...	91
Miscellaneous ...	Packages ...	23,607	17,990	16,335	37,808	8,290	8,889	4,641	6,727	28,547
Onions	Bags & Baskets	7,979	9,078	12,022	21,964	4,458	935	24	200	5,617
Oil	Casks	381	587	50	434	18	4	25	9	56
Piece-goods ...	Bales and Cases.	3,372	3,419	5,843	6,205	1,075	1,281	1,540	961	4,857
Potatoes	Bags & Baskets.	3,837	2,703	2,284	2,437	157	...	115	10	282
Poonac	Bags	13,116	15,187	26,134	33,880	5,962	4,165	3,764	2,236	16,127
Piano	No.	10	8	3	41	5	2	3	...	10
Paddy ...	Bags	...	...	...	...	...	...	5	...	5
Rice	,, ...	17,589	65,475	2,059	1,138	1	...	2,639	589	3,229
Redwood	Tons	1,382	2,052	1,809	699	342	384	273	655	1,654
Seeds, Gingelly and Castor ...	Bags	20,137	80,411	19,021	1,313	652	65	7,633	4,304	12,654
Skins, Sheep and Goat, Tanned ...	Bales	32,498	30,399	31,209	32,194	7,435	10,035	7,207	9,386	34,063
Sandalwood ...	Bundles ...	672	637	1,728	1,534	43	...	1	286	330
Spirits and Wine	Cases	135	331	...	332	...	18	1	22	41
	Casks	5	87	...	977	1	39	25	...	65
	Puncheons ...	...	18	...	...	...	...	...	...	...
Sugar	Bags	1,112	7,296	...	599	21	1	62	77	161
Specie	Boxes	153	33	55	94	21	...	9	18	48
Tamarind ...	Bundles ...	8,277	2,549	1,156	6,445	1,969	1,467	61	1,834	5,331
Turmeric	Bags	1,898	1,526	...	2,159	217	20	374	330	941
Tea	Cases	4,275	3,822	2,384	2,265	424	785	370	190	1,769
Two-wheeled Carriage	No.	...	...	2	1	...	...	...	...	...
Wool	Bales	970	1,043	1,196	1,021	436	443	207	384	1,470
Yellow Metal ...	Tons	3	5	...	107	...	...	100	...	100

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VI. STATEMENT OF GOODS EXPORTED TO COAST PORTS.

—	Packages.	1888-89.	1889-90.	1890-91.	1891-92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Totals for 1892-93.
Beer and Ale ...	Cases ...	249	456	289	352	81	86	58	69	294
	Casks ...	16	110	159	159	15	10	45	24	94
	Hogsheads ...	161	10	47	7	1	5	9	26	41
Cinchona Bark ...	Bales ...	178	186	...	395	...	84	...	...	84
Chillies ...	Bags & Bundles	2,908	5,535	4,592	2,064	1,264	1,126	280	237	2,907
Cigars	Cases ...	1,488	1,298	1,345	1,418	311	277	288	260	1,136
Coffee ...	Bags ...	506	574	605	507	806	334	198	111	1,449
Cotton ...	Bales ...	1,972	4,761	8,521	5,721	832	1,312	573	1,528	4,245
Cotton Twist ...	,, ...	3,816	3,075	5,103	4,698	784	950	3,123	1,281	6,138
Coriander and Omum Seeds ...	Bags ...	2,728	7,071	4,783	2,970	1,531	1,012	582	3,877	7,002
Cement ...	Casks ...	...	...	...	...	...	...	8,611	297	8,908
Carpets ...	Bales ...	34	26	45	68	14	11	14	12	51
Coal	Tons ...	...	94	976	275	25	...	75	350	450
Deer Horns ...	Packages ...	85	7	84	108	1	...	100	50	151
Explosive ...	Cases ...	201	303	55	2,668	315	32	26	958	1,331
Eggs	Pots ...	2,717	3,882	2,801	1,165	157	193	379	396	1,125
Firewood	Tons ...	28	8	...	2	...	...	...	...	...
Four-wheeled Carriage	No. ...	26	9	34	21	9	5	5	12	31
Groundnuts ...	Bags ...	30,757	20,996	61,463	27,790	7,797	731	2,352	6,959	17,839
Gram, Peas, &c. ...	,, ...	15,204	8,987	3,568	521	66	587	33	540	1,226
Horns, Cow and Buffalo ...	Tons ...	198	336	30	310	28	68	112	99	307
Hides ...	Bales & Bundles	407	495	506	379	111	109	142	164	526
Indigo	Cases & Chests.	405	829	412	165	...	16	600	200	816
Iron	Tons ...	989	743	850	2,244	885	1,517	26	183	2,611
Jaggery	Bags ...	376	296	...	258	86	4	35	1,323	1,448
Kerosine Oil ...	Cases ...	1,516	4,680	3,463	10,327	...	...	...	...	...
Myrabolams ...	Bags ...	322	139	535	1,054	1	6	12	272	291
Miscellaneous ...	Packages	12,419	20,868	36,308	50,510	12,262	11,366	12,071	33,885	69,584
Onions ...	Bags & Baskets	9,705	11,516	21,141	22,442	2,036	4,512	26,480	20,378	53,406
Oil	Casks ...	790	1,844	1,281	807	285	43	288	71	637
Piece-goods ...	Bales & Cases	3,429	3,613	6,259	5,615	1,566	2,336	1,779	2,970	8,651
Potatoes ...	Bags & Baskets	24,229	21,992	26,470	23,637	918	7,881	14,823	766	24,388
Poonac	Bags ...	2,210	1,469	4,752	4,770	6,023	3,355	3,951	8,852	22,181
Piano	No. ...	5	42	24	23	2	4	8	2	16
Paddy	Bags ...	27,149	4,019	11,426	...	...	250	1,300	7,256	8,806
Rice	,, ...	6,790	8,198	8,098	5,448	3,076	1,924	12,678	14,215	31,893
Redwood	Tons ...	62	194	...	119	48	639	6	...	693
Seeds, Gingelly and Castor ...	Bags ...	19,374	28,756	57,157	16,803	401	252	633	4,501	2,787
Skins, Sheep & Goat, Tanned ...	Bales	510	758	1,271	721	90	166	253	587	1,046
Sandalwood ...	Bundles ...	224	342	1,856	153	54	9	162	31	256
Spirits	Cases ...	2,143	2,098	3,049	2,982	1,255	772	1,023	733	3,783
	Casks ...	150	162	250	727	86	210	196	224	716
	Puncheons ...	2	16	54	13	1	2	95	91	189
Sugar	Bags	160	2,307	2,093	773	564	338	268	249	1,419
Specie	Boxes	278	164	154	236	169	132	169	40	510
Tamarind ...	Bundles ...	2,010	3,598	17,197	3,624	4,340	1,254	725	1,934	8,253
Turmeric	Bags	8,972	463	4,719	19,258	5,218	2,762	3,751	6,152	17,883
Tea	Cases	55	544	298	341	17	15	15	15	62
Two-wheeled Carriage	No.	14	8	27	15	4	2	4	6	16
Wool	Bales	37	567	475	769	147	190	118	148	603
Yellow Metal ...	Tons	88	25	47	53	12	4	51	...	67
								10		

STATEMENT OF STORES, &c., IMPORTED BY GOVERNMENT.

Department.	Description.	Class.	1888-89.	1889-90.	1890-91.	1891-92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	
Accountant-General.	Specie Silver.	Boxes	1,789	1,109	1,176	403	100	...	370	112	
	,, Copper.	,,	335	1,320	3,475	5,100	...	...	...	710	
	Silver&Copper Notes ...	,,	174	...	...	...	...	...	...	...	
	Packages ...	,,	19	21	8	32	...	...	...	...	
State Railway ...	Packages&Pieces	No.	...	1	...	27	...	...	17	2	
	Rails ...	,,	593	...	3	...	...	1	...	...	
	Sleepers ...	,,	...	...	...	...	...	...	...	...	
	Bridge Works ...	Tons	...	...	...	...	...	...	...	...	
Public Works Department	Boilers ...	No.	...	...	...	...	...	...	...	...	
	Coal ...	Tons	2	...	...	2	...	...	...	...	
	Iron ...	,,	106	44	60	50	...	...	...	...	
	Stores ...	Pkgs.	220	442	250	271	...	20	...	...	
Ordnance	Coal ...	Tons	1,691	1,127	2,049	15,148	...	...	9	...	
	Ammunition ...	Boxes	86	1,968	939	...	2,023	1,130	2,096	1,248	6,4
	Stores ...	Pkgs.	1,303	51	...	2,148	...	...	...	...	
Madras Harbour Works	Cement ...	Casks	15,838	22,268	22,898	13,017	...	...	...	...	
	Stores ...	Pkgs.	35,764	40,241	30,375	1,869	4,067	1,152	10,296	6,812	28,5
	Coal ...	Tons.	321	1,009	895	3,869	...	...	...	...	
Clothing ...	Packages ...	No.	...	496	586	...	...	...	...	...	
Police ...	,, ...	,,	1,773	2,831	1,527	1,983	...	...	...	...	
Salt Revenue ...	,, ...	,,	248	135	335	122	589	635	709	391	2,3
Post Office ...	,, ...	,,	75	115	190	272	98	51	13	5	1
Medical ...	,, ...	,,	980	1,858	1,739	1,119	220	56	3	11	2
Telegraphs ...	,, ...	,,	1,384	1,616	1,250	1,779	198	249	129	282	8
Stationery ...	,, ...	,,	6,899	16,414	19,211	34,768	415	50	32	510	1,0
Stamps ...	,, ...	,,	1,088	743	611	732	1,752	1,949	6,769	13,656	24,1
Commissariat ...	,, ...	,,	1,435	1,499	1,647	1,961	19	107	783	288	1,1
Gazette Press ...	,, ...	,,	1,811	1,779	4,384	8,588	186	656	179	101	1,1
Marine ...	,, ...	,,	52	32	2,414	161	2,013	1,204	3,038	1,165	7,4
Supt., Railway Mail Service ...	,, ...	,,	32	182	511	729	7	126	11	5	1
Revenue Survey...	,, ...	,,	52	31	...	...	117	107	509	147	8
Agriculture ...	,, ...	,,	252	52	32	297	...	...	...	...	
Government Central Museum ...	,, ...	,,	1	6	292	380	73	133	1	1	2
Under-Secy. to Government ...	,, ...	,,	6	4	10	15	209	101	6	4	3
Supt. of Prisons...	,, ...	,,	87	84	94	235	3	2	3	2	1
Revenue Board ...	,, ...	,,	3	9	...	1	439	28	20	17	5
Forests ...	,, ...	,,	65	36	139	424	2	3	8	4	1
Bank of Madras	Specie Silver.	Boxes	31,811	175	1,318	1,196	...	15	12	6	3
Presidency College	,, Copper	,,	...	3	...	...	2	1	1	6	1
School of Arts ...	Packages ...	No.	...	56	...	...	...	...	...	...	
Sanitary Commissioner	,, ...	,,	2	13	40	28	7	...	...	...	
Inspector of Cattle Diseases ...	,, ...	,,	1	2	...	3	...	...	2	6	1
Chemical Examiner	,, ...	,,	...	...	...	...	...	...	...	1	
Medical College ...	,, ...	,,	116	...	...	...	...	...	...	...	
Dy. Collectors ...	,, ...	,,	25	10	...	9	...	...	...	...	
Camp Equipage ...	,, ...	,,	50	15	32	31	2	...	100	...	
Astronomer ...	,, ...	,,	...	2	64	73	...	2	16	...	1
Presidency Pay Master ...	,, ...	,,	...	...	14	9	1	10	13	7	3
Registration ...	,, ...	,,	11	1	...	...	...	...	2	16	3
Director of Public Instruction ...	,, ...	,,	8	6	6	23	2	7	4	2	1
Superintendent, Remount Depôt, Hussur.	,, ...	,,	24	6	13	2	5	...	...	...	1
	,, ...	,,	...	2	3	7	1	3	...	...	
	,, ...	,,	...	9	5	9	...	137	...	...	
Resident, Mysore, in Bangalore.	,, ...	,,	...	...	...	...	...	...	2	...	1
Secretary for Berar Hyderabad.	,, ...	,,	...	...	...	...	...	...	300	300	6
H.E. Lord Wenlock Government House, Madras.	,, ...	,,	...	...	...	...	...	...	1	1	
Judge, Civil City Court, Madras.	,, ...	,,	...	...	...	...	...	...	6	1	
Quarter Master General.	,, ...	,,	...	...	...	...	...	...	...	...	
Registrar of High Court.	,, ...	,,	...	...	...	...	...	...	...	2	
	,, ...	,,	...	...	...	...	...	...	...	1	
	,, ...	,,	...	...	...	...	...	...	3	...	
	,, ...	,,	...	...	...	...	...	...	1	...	

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STATEMENT OF STORES, &c., EXPORTED BY GOVERNMENT.

Department.	Description.	Class.	1888-89.	1889-90.	1890-91.	1891-92.	Quarter ending 30th June 1892.	Quarter ending 30th Sept. 1892.	Quarter ending 31st Dec. 1892.	Quarter ending 31st March 1893.	Total for 1892-93.
Accountant General	Specie Silver.	Boxes.	118	174	20	411	27	9	3	6	45
	,, Copper,	,,	136	216	330	965	173	25	2	...	200
	,, Notes,..	,,	5	4	10	6	4	3	3	3	13
	,, Packages	No.	1	1	6	4	...	1	...	...	1
Bank of Madras...	,, Silver...	Boxes.	...	10	...	34	...	...	...	...	...
,, ,, ...	,, Copper.	,,	...	37	...	...	33	29	...	...	62
Ordnance ...	Packages & Pieces.	No.	5,765	25,038	6,564	8,595	1,083	1,123	2,085	1,540	5,831
Public Works Department ...	,, ...	,,	4,420	18,358	429	1,784	141	23	107	217	488
Clothing ...	,, ...	,,	916	1,018	1,254	1,327	225	483	133	195	1,086
Police ...	,, ...	,,	749	849	727	889	95	495	272	112	974
Salt Revenue ...	,, ...	,,	330	493	306	591	84	293	149	199	725
Medical ...	,, ...	,,	1,049	1,868	1,552	1,367	518	273	123	696	1,610
Telegraph ...	,, ...	,,	355	1,125	9,462	8,845	35	120	3,735	440	4,330
Stationery ...	,, ...	,,	777	398	799	693	153	132	121	374	780
Stamps ...	,, ...	,,	165	171	195	220	53	45	134	66	298
Commissariat ...	,, ...	,,	5,128	5,179	7,761	7,971	740	788	2,672	2,005	6,205
Gazette Press ...	,, ...	,,	445	567	476	526	114	128	156	105	503
Marine ...	,, ...	,,	419	307	268	390	92	122	78	74	366
Revenue Board ...	,, ...	,,	26	52	79	77	18	5	4	10	37
Revenue Settlement	,, ...	,,	157	55	87	51	29	33	17	5	84
Revenue Survey...	,, ...	,,	31	77	74	75	56	233	92	71	452
Superintendent of Prisons ...	,, ...	,,	151	91	71	69	35	90	19	52	196
Registration ...	,, ...	,,	80	61	61	66	...	...	...	43	43
Conservator of Forests ...	,, ...	,,	28	49	31	34	3	4	11	15	33
Quarter-Master General ...	,, ...	,,	...	...	...	...	...	4	...	...	4
Government Central Museum ...	,, ...	,,	7	6	9	10	4	15	2	1	22
Deputy Collectors.	,, ...	,,	20	...	...	2	9	...	...	..	9
Camp Equipage ...	,, ...	,,	...	...	...	...	...	...	...	...	...
Government Astronomer ...	,, ...	,,	...	5	2	...	...	11	2	...	5	18
Agriculture ...	,, ...	,,	...	...	...	5	15	2	1	...	5	8
General Hospital..	,, ...	,,	...	...	...	...	...	...	...	...	...	...
State Railways ...	,, ...	,,	293	...	...	100	...	...	...	...	...	...
Inspector of Cattle Diseases ...	,, ...	,,	11	11	3	3	1	...	...	...	1	
Chemical Examiner.	,, ...	,,	...	1	3	...	...	1	...	...	1	
Director of Public Instruction ...	,, ...	,,	9	2	16	10	3	1	...	...	6	
Registrar of University ...	,, ...	,,	14	16	16	13	...	...	10	...	10	
Collectors ...	,, ...	,,	...	...	...	10	...	...	...	...	...	
Curator of Government Garden, Ooty	,, ...	,,	...	...	2	12	11	...	...	...	...	
Engineer, H. T. Board ...	,, ...	,,	..	1	...	...	...	...	...	...	...	
Crown Officer, High Court ..	,, ...	,,	1	8	13	14	6	3	1	8	18	
School of Arts ...	,, ...	,,	1	...	...	...	...	...	...	...	...	
Secretary to Government, Public Department ...	,, ...	,,	4	1	...	2	...	...	...	...	...	
Registrar-General of Births, Deaths and Marriages ...	,, ...	,,	...	...	...	...	...	...	...	...	...	
Inam Commissioner	,, ...	,,	...	...	1	...	1	...	...	...	...	...
Consulting Engineer to Government Railways.	,, ...	,,	...	...	4	36	20	1	...	...	...	...
Civil Engineering College ...	,, ...	,,	...	...	...	...	...	...	...	...	1	1
Superintendent, Censuss Operations.	,, ...	,,	...	...	...	...	...	...	...	...	4	4
Post Office ...	,, ...	,,	..	...	...	...	...	...	...	1	...	1
Sanitary Commissioner ...	,, ...	,,	...	...	...	...	...	...	...	...	...	1

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ADMINISTRATION REPORT

OF THE

DEPUTY CONSERVATOR OF THE PORT OF MADRAS, FOR THE YEAR 1892-93.

The number of vessels entering the Port of Madras during the year is shown in the following statement and compared with the preceding year, shows a decrease both in number and tonnage.

	1891-92.		1892-93.	
	No.	Tonnage.	No.	Tonnage.
Steam ships, Mercantile	697	1,195,738	629	1,110,987
Sailing do. do.	14	19,736	*8	9,570
Do. Native Craft	125	16,213	74	6,724
Men-of-War, Government Ships, Transports, &c.	16	16,637	20	28,952
Total.	852	1,248,324	†731	1,156,233

The decrease being due, I presume, to stagnation in the shipping trade.

2. The number of vessels which left the Port during the year was—

	No.	Tonnage.
Steam ships	647	1,135,056
Sailing do.	8	9,570
do. Native Craft	84	8,203
Total...	739	1,152,829

3. The Revenue amounted to Rs. 1,29,172 against Rs. 1,54,078 for 1891-92, and was made up from the following sources :—

Port Funds	Rs.	1,02,363
Salvage	„	547
Diver Services	„	277
Hire of Port Raft	„	845
Boat Licenses	„	513
Shipping Office Fees and Fines	„	808
Office Fees for Overtime	„	1,248
Sale of old Masulah boat	„	89
Sundries	„	71
		1,06,761
Pilotage and Boats' charges connected ...		22,411
Total...		1,29,172

* NOTE.—3 Sailing vessels of 4,301 tons called for orders only.

† Including { 28 German. 19 French. 23 Austro-Hungarian. 3 Norwegian.

Total Foreign 73

4. *Artificial Harbour.*—Shipping work has gone on throughout the whole year without a single day's interruption within the Harbour. Two large sailing vessels were berthed within the Harbour. The Native Craft have also availed themselves of the use of the Harbour to a great extent. Accretion of sand to the south of the Harbour still continues, and unless something is done soon in the way of dredging, No. 1 mooring will be closed to vessels of deep draft.

The Harbour was six times full during the year, but no serious detention of vessels outside has occurred; when practical an extra steamer has been moored in the Harbour fair way.

The S.S. "Caxo" was ordered out of the Harbour on the 7th May 1892 to make room for other vessels. Barque "Bernica" (Native vessel) dismasted at sea, was brought inside the Harbour to re-fit.

Weather.—The warning signals have only been hoisted once for a few hours during the year on (20th October).

Accidents and Casualties.—No accidents or casualties occurred during the year, nor were any boats damaged. No loss of life has been reported.

Moorings.—All the moorings of the inner buoys were examined and found in condition to bear the strains brought on them. Nos. 1 and 2 will require new chain at the next overhaul in August. A new mooring chain with a two-ton anchor has been placed at the Northern Cassimode mooring. Oil moorings were put down for Messrs. Best & Co. in No. 5 berth, the buoys and chain for which were obtained from the Harbour Works and the anchors locally. The buoys have been cleaned and painted red. A new buoy has been placed on the northern side of the entrance and painted black.

Boats.—The same difficulty as in former years has been experienced by the Harbour Masters in boarding vessels during the N. E. monsoon: the Board have, however, sanctioned a 37 foot Steam Cutter, which will be built in the R. I. M. Dockyard, Calcutta. The Establishment has worked fairly well during the year and the boats, gear, &c., are in good condition. The Port Masulah boat not being required, was sold.

Port Raft.—The services of the Port Raft have continually been required; 47 trips were made.

Cargo Boat.—There are 78 lighters registered against 73 for last year, giving an increase of five, while the Masulah boats have fallen to 109 against 129, a decrease of 20.

Time Signal.—The Time signal has been altered and now drops at 1 P.M. (Madras Mean Time); there were 19 failures or irregularities during the year.

Life-Saving Apparatus.—Quarterly practice has taken place, and both men and gear are efficient.

Leave.—Commander H. B. Simpson, R.I.M., Deputy Conservator of the Port, availed himself of one year's furlough, granted by the Government of India on May 28th, 1892, and was relieved by Mr. J. P. James, of the Madras Port Service, as a temporary measure pending the arrival of Commander C. W. Hewett, R.I.M., from Bombay, the latter officer took over charge from Mr. James on June 30th.

Mr. H. C. Taylor, Harbour Master, availed himself of 3 months' privilege leave granted him by the Harbour Trust Board on July 18th, 1892.

Commander Hewett, R.I.M., was on 30 days' privilege leave, from 3rd September, granted him by the Madras Government; during his absence the duties of the Office were carried on by Mr. C. S. Johnson, Reserve Port Officer, in addition to his own.

Sunday Work.—The Deputy Conservator opened his Office for work on 23 Sundays during the year.

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Harbour Master.—1,466 vessels have passed through the hands of the Harbour Masters, without accidents, a condition of things which I consider highly creditable to those Officers. The duties of Mr. Corfield, Senior Harbour Master, have become too heavy for one man, a boatswain has been sanctioned by the Board to assist him. The new Office for the Harbour Masters has been finished and connected with the Telephone Exchange, which is of great convenience to them and the shipping community generally.

Port Diver.—The Port Diver when unoccupied with the moorings is as busy as in former years salving cargo; his department and gear is efficient.

Shipping Office.—The business of the Shipping Office shows a decrease on last year as the figures given below will show: better office accommodation and probably an increase of establishment for this department is required.

	No.	
European Seamen engaged	13	42
,, ,, discharged	29	
,, ,, sent to Hospital	12	
,, ,, ,, Jail	7	
Native Seamen engaged	52	818
,, ,, discharged	766	
Native Seamen sent to Hospital	2	
,, ,, ,, Jail	1	
Distressed Seamen sent Home	10	

The fees and fines collected amounted to Rupees 808.

The usual periodical returns and statements have been sent to the Board of Trade, London, and the Government of Madras as they fell due.

CHARLES W. HEWETT,
Commander, R. I. M.,
Ag. Dy. Conservator of the Port.

PORT OFFICE,
MADRAS, *8th May* 1893.

5. Under expenditure, the principal differences are as noted in the margin. The increase under "establishment" is reported to be more apparent than real, being due to the inclusion of the porterage establishment, which was previously charged direct to the porterage accounts. It is observed, however, that a similar explanation was given in the report for 1891–92 of the increase of establishment charges from Rs. 31,159 in 1890–91 to Rs. 43,432. The Chairman will be requested to explain fully the cause of the further increase in the year under review.

	1891–92.	1892–93.
	Rs.	Rs.
Establishment	43,432	52,937
Porterage	96,806	75,935
Petty construction and repairs	26,111	35,737

The decrease under "porterage" is consequent on the decline of the trade of the port. The principal new petty work carried out during the year was the extension of the coal yard to meet the growing demand for storage room for that article.

6. With advertence to paragraphs 20 *et seq.* of the report it is observed that the Board's application for reductions in the rate of interest and annual refund of capital paid to Government has been disposed of in G.O., dated 8th August 1893, No. 746, Financial.

7. The increase in the tonnage entering the port of Madras, which was noticed in the report for 1891–92, was not maintained during 1892–93. The figures for the two years are 436,340 and 363,781, respectively; they show a decline of 72,559 tons. The tonnage in 1892–93 is, however, in excess of that of 1889–90 and previous years. The decline in 1892–93 is principally attributable to the number of bags of food-grains having fallen from 1,147,048 to 205,176 and to the dullness of the foreign import trade. There was a steady increase in the quantity of coal landed, the amount being 63,600 tons against 47,010 in the preceding year. Exports show a continued decrease which is explained by the Board's Traffic Manager as being due to the failure of crops and the fact that cotton was railed direct to Bombay for shipment and ground-nuts were mostly despatched from Pondicherry and Cuddalore instead of being sent to Madras. It is noteworthy that arrangements were made during the year for landing kerosine oil in bulk by means of pipes connecting the shipping with tanks on shore. Special moorings were laid down inside the harbour for tank steamers.

	1891–92.	1892–93.
Cotton, bales ..	48,202	26,140
Ground-nuts, bags ..	93,132	26,209

8. The decline in the trade of the port of Madras naturally affected the shipping and tonnage during the year. The figures show a serious decrease. The Port fund and Pilotage revenue consequently fell from Rs. 1,54,078 to Rs. 1,29,172. It is satisfactory that no casualty or accident of any kind occurred to the shipping during the year. With advertence to paragraph 41, in which an accretion of sand in the south-west corner of the harbour is reported, it is observed that in the event of the services of the dredger *Wenlock* being found necessary, early application for her should be made. The rules to regulate the admission of explosives into the harbour, referred to in paragraphs 50 *et seq.* of the report, are under consideration.

	1891–92.	1892–93.
Ships	852	731
Tonnage ..	1,248,324	1,156,233

9. The slow advance in the work of "construction" is explained to be due to the difficulty experienced in dredging away the old rubble base. Work was confined entirely to the pier heads at the ends of the arms. The foundations of these have been sunk to a depth of 40 feet below sea level as against 22 feet for the groynes, and the width of this portion of the work has been extended to 38 feet, whereas the groynes cover only 24 feet. At the end of the year a length of $20\frac{1}{4}$ feet of superstructure remained to be set to reach the point at which the caisson is to terminate the north pier head. The south pier was not so far advanced as $47\frac{1}{2}$ feet of blockwork remained to be set to reach a similar point. The expenditure on "construction" and protective

works to the north of the harbour amounted to Rs. 2,56,019 against Rs. 6,52,106 in 1891–92 and Rs. 6,66,547 in 1890–91. The total expenditure up to the 31st March 1893 was Rs. 1,19,38,529 against the revised estimated total cost of Rs. 1,23,83,386.

10. In paragraph 65 of the report it is said that the depth of water inside the harbour remains practically unchanged; this statement does not seem reconcilable with that made in paragraph 41 with regard to the accretion of sand in the south-west corner of the harbour to such an extent as to materially affect No. 1 mooring. A blank which occurs in the concluding clause of the Traffic Manager's report should have been filled in before submission to Government.

11. The Government considers that the report is as satisfactory as could be expected in the circumstances of trade which obtained during the year.

(True Extract.)

J. F. Price
Chief Secretary.

To the Chairman, Harbour Trust Board.
" Presidency Port Officer.
" Financial Department.
" Public Department.
" Public Works Department, with 3 copies of the report.
" Public Works Department, Railway Branch, } with copy of report.
" Revenue Department,
" Chairman of Chamber of Commerce, Madras,
" " " of Madras Trades Association,
" Secretary to the Port Trust of Bombay.
Editor's Table.

ENDORSEMENT—dated 25th August 1893, No. 311, Marine.

Copy to the Government of India, Finance and Commerce Department, in continuation of No. 292, dated 13th August 1892.

J. F. PRICE,
Chief Secretary.

Encl. J. Moses.

P. W. CURRENT No. 7722.

No. 2227 W 9 31-8-93

Govt. of {1893} Madras.

MARINE.

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Issued 2-9-93 (E.C.)

Recd. 9-9-93 105.C

Rect. 14.9 Rect. 14-9-93

G.O., &c., 25th August 1893,
Nos. 310, 311.

AUGUST.

Harbour Trust Board.

Reviewing the administration report of the — for the year 1892–93, and forwarding copy to the Government of India, Finance and Commerce Department.

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with copy of R
for W & Sec
with Proc

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